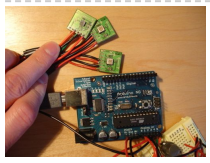
Use Arduino for Projects

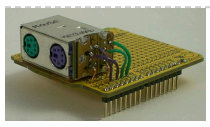
Advanced View Arduino Projects List

List of Projects using arduino with advance view:

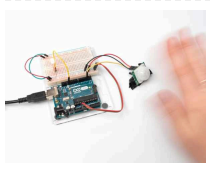
1.  Arduino Nano Matter: Community Preview Overview of the Project Arduino Nano Matter is the new project that is to be opened with the same main board and additional software based on the Arduino Nano microcontroller. The idea is to create a small-scale, affordable, and versatile platform for as many practices…... Listed under: Development Board – Kits Project Ideas, Other Project Ideas

2.  Sleep Tracking using an Arduino Background and motivation Two factors inspired this project: my struggle to wake up in the morning and my enjoyment of collecting and graphing data from daily tasks. My main problem with waking up in the morning is that feeling of grogginess along with an intense…... Listed under: Home Automation Projects, Metering – Instrument Projects, Projects

3.  Simple Event Counter The miniscule event counter based on a microcontroller is built using the affordable Digispark Attiny development board. A benefit of this design is that it can be connected to its trigger input regardless of whether it is an active or passive switch. Every time the…... Listed under: Metering – Instrument Projects

4.  PS/2 Keyboard Or Mouse using Arduino Arduino is not restricted to receiving data from sensors only; you have the ability to also link a full-size PS/2 keyboard and type as you would on a traditional computer. Attaching a keyboard to an Arduino may seem strange (since it's a small microcontroller), however,…... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects

5.  Play Midi Files From an SD Card Using Your Arduino UNO Save MIDI files on an SD Card and use an SD shield connected to your Arduino to play these songs on a MIDI device. This project demonstrates the development of a MIDI player using Arduino. The Arduino is connected to a DS1307 Data Logger Shield…... Listed under: Other Projects

6.  PIR Motion Sensor With Arduino in Tinkercad We will learn how to detect movement in a space using a PIR motion sensor and Arduino's digital input. We will set up a circuit with a breadboard and use basic Arduino code to manipulate a solitary LED. We will utilize Tinkercad Circuits to replicate…... Listed under: Sensor – Transducer – Detector Projects

7.  Model Airplane Autopilot using Arduino Hello everyone! My age is twenty years. I started using my Arduino for the first time during Christmas, and I have been busy working on Arduino projects to create this instructable for you. I trust that it will be beneficial! The purpose of this project…... Listed under: Game – Entertainment Projects, Projects

8. Introduction to Arduino Using TinkerCAD Simulator: No Hardware Required Context and Preparation Getting started with tinkering on Microcontrollers can often be hindered by the need to purchase hardware. In this tutorial, we offer an introduction to Arduino that requires no prior experience and no physical hardware. Instead, we will utilize an Arduino simulator called…... Listed under: Other Project Ideas

9. How to use a Piezo element to detect vibration using Arduino This tutorial shows you how to use a Piezo element to detect vibration, in this case, a knock on a door, table, or other solid surface. A piezo is an electronic device that produces a voltage when it undergoes physical deformation from a vibration, sound…... Listed under: Projects, Sensor – Transducer – Detector Projects

10. "HiFi" Online Radio: Internet Streaming With ESP32 and VS1053 Instructions on creating an Internet Radio Streamer with the ESP32 and the MP3 decoder "VS1053". Numerous tutorials exist for a device like this online (many of which provided the information and ideas I needed), but I decided to share my own version as I had…... Listed under: Other Projects

11. Beat the Heat: DIY Temperature-Controlled Fan Speed Regulator This project is an independent fan speed regulator that automatically adjusts the speed of an electric fan based on real-time feedback. The use of embedded system technologies like a microcontroller and closed-loop control architecture enables successful and reliable temperature regulation. The ATMega8/168/328 microcontroller allows for…... Listed under: Temperature Measurement Projects

12. Automatic Water Dispenser using Arduino Automatic Water Dispenser using Arduino Approximately 71% of the Earth's surface is water, yet only a meager 2.5% of it is potable. Due to increased population, pollution, and climate change, it is anticipated that we will face year-round water scarcity as early as 2025. On…... Listed under: Home Automation Project Ideas

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

dispense..... Listed under: Clock – Timer Projects

14. Automatic Missile Defence System The Automated Missile Defense System is capable of neutralizing airborne threats such as planes, high-altitude ballistic missiles, and low-altitude cruise missiles. Having missile defense systems is crucial for India due to its surrounding hostile neighbors. A Surface to Air missile is a type of missile..... Listed under: Security – Safety Projects

15. Arduino Sketch Rock Paper Scissors This drawing showcases a rock-paper-scissors game that utilizes three pushbuttons for user input, two hobby servos instead of a human hand to show the countdown and selections, and tone feedback through a speaker. The code is designed to showcase a variety of techniques. non-blocking event..... Listed under: Game – Entertainment Projects

16. Arduino Mosquito Repeller In this tutorial, I will demonstrate how to create a mosquito repellent device with the help of an Arduino. The repellent comes in a shield form that can be connected to the Arduino board, allowing for easy modification of its frequency. This project is perfect..... Listed under: Other Projects

17. Arduino – Control a DC motor with TIP120, potentiometer and multiple power supplies A simple diagram demonstrating how to regulate the velocity of a DC motor using a potentiometer connected to your Arduino device. Additionally demonstrates the method of utilizing a TIP120 transistor for enabling the Arduino to manage a more powerful power source. Transistors consist of 3..... Listed under: Metering – Instrument Projects, Motor Projects

18. Arduino Button Mouse Control Code With the Mouse library, an Arduino Leonardo, Micro, or Due can manipulate the onscreen cursor of a computer. This specific instance involves the use of five pushbuttons to control the movement of the cursor on the screen. Four buttons control direction (up, down, left, right)..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects, Projects

19. TMP36 Temperature Sensor With Arduino in Tinkercad For this assignment, your goal is to transform the Arduino into a thermometer! Utilize a temperature sensor to track your skin's temperature and record the information using three LEDs. The Arduino, being a digital tool, is able to collect information from analog devices such as..... Listed under: Temperature Measurement Projects

20. Power Quality Meter (PQ Monitor) using Arduino Arduino UNO project, Power Quality Meter, someone would call it’s PQ Monitor or PQ Analyzer. I had already published one blog devoted RMS voltage measurements on full band 20 – 20 000 Hz audio signals. (Following my own style, I’d refer to already published..... Listed under: Metering – Instrument Projects, Projects

21. PID Thermostat For The Arduino PID Thermostat This PID thermostat is designed for the arduino platform. It provides separate tuning parameters for several hardware 'profiles', and features an autotune mode to calculate the PID parameters for a specific setpoint. Installation Hardware DS18-series (I'm using the DS18B20) temperature sensor Solid-state relay..... Listed under: Sensor – Transducer – Detector Projects

22. Multiplexing 7 Segment displays with Arduino and Shift Registers This guide will explain the basics of controlling multiple 7 segment displays using an Arduino and a couple of shift registers. This project is ideal for displaying numerical data or managing a set of LEDs. As a beginner, like me, I had no clue on..... Listed under: Calculator Projects, LCD Projects

23. MQ-7 Carbon Monoxide Sensor Circuit Built with an Arduino In this project, we will go over how to build a carbon monoxide sensor circuit with an Arduino. The sensor we will utilize is the MQ-7 sensor for detecting carbon monoxide. This sensor is responsive to the impacts of CO. Carbon monoxide (CO) is a..... Listed under: Sensor – Transducer – Detector Projects

24. Maze Solving Robot In this guide, I will demonstrate how to construct a robot that can solve mazes. This is my third try at creating one. The initial attempt was a total flop. The second was proficient at reaching the maze's end but could not backtrack and take..... Listed under: Robotics – Automation Projects

25. Interfacing Electronic Circuits to Arduinos Interfacing Electronic Circuits to Arduino In this tutorial, I show how to link an Arduino to an ARINC 429 transceiver as an illustration of interfacing an Arduino with circuits, so you can use these methods for your projects. The ARINC 429 bus is commonly utilized..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects, Projects

26. How to make Arduino Laser Turret using Servo motors and Joystick Arduino Laser Turret, Overview: In this endeavor, I will show how to construct an Arduino

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

27. Ethernet Switching – with Arduino Aim: Switch relays from the ethernet or the internet, using your mobile, tablet or computer with a nice graphical user interface. Update V4.06 Please read the below steps to Step 2 if you are viewing this article for the first time. Please go to step..... Listed under: Internet – Ethernet – LAN Projects

28. DIY Self Balancing Robot using Arduino After seeing RYNO motors and Segway's self balancing scooters, I was always interested in creating something alike. After some consideration, I made the decision to create a Self Balancing Robot using Arduino. This way, I would understand the fundamental idea behind the scooters and also..... Listed under: Robotics – Automation Projects

29. DIY ESP32 Wifi Self Balancing Robot – B-Robot ESP32 Arduino Programing https://youtu.be/tZynlj1StpM This article is proudly sponsored by PCBWAY. PCBWAY make high quality prototyping PCBs for people all over the world. Try it for your self and get 10 PCBs for just $5 at PCBWAY with very great quality, Thanks PCBWAY. The ESP32 Balancing Robot Shield..... Listed under: Robotics – Automation Projects

30. Create laser range finder using arduino [highlight bgcolor="ffbb00"]I have collected 2 methods to create laser range finder, one is very simple but for hobbiest the first one using arduino clock but it comes with errors. Its just to conceptulize how we can create range finder. The second one with the The 7558..... Listed under: LED Projects

31. Blink led example arduino with python To blink an LED with an Arduino using Python, you will need to: Connect the LED to the Arduino board. You will need to connect the positive leg of the LED (the longer leg) to a digital output pin and the negative leg (the shorter..... Listed under: How To – DIY – Projects, LED Projects

32. Arduino Switch (case) Statement, used with serial input An if statement allows you to choose between two discrete options, TRUE or FALSE. When there are more than two options, you can use multiple if statements, or you can use the switch statement. Switch allows you to choose between several discrete options. This guide..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects, Projects

33. Arduino Datalogger This tutorial will show you how to build a simple data recorder using Arduino. The aim is to understand the basic principles of using Arduino to collect data and show it on the terminal. This basic structure can be used for a variety of purposes..... Listed under: Arduino Android

34. Arduino-Based Robotic Arm Controlled by Hand Gestures Introduction Greetings to all, hoping everyone is in good health. We're thrilled to present our newest article about Arduino projects. This article discusses the development of a robot arm that is operated through hand movements with the help of Arduino UNO. To identify hand motions,..... Listed under: Robotics – Automation Projects

35. Arduino RC Robot https://youtu.be/ytwDgwwSEc0 Description A durable, 3D printed, remote controlled Arduino based robot with several hundred meters range. A modular quick-connect motor scheme lets you rapidly prototype different robot designs without any tools. Perfect for robotics education for kids. Whats it all about? So you've just started..... Listed under: Robotics – Automation Projects

36. Low Cost Bioprinter The goal of this project is to develop a low-cost bioprinter to make bioprinting more accessible to research institutions. Currently, low-end bioprinters cost approximately $10,000 while high-end bioprinters cost approximately $170,000. In contrast, our printer can be built for approximately $375. Supplies: Parts: Ramps 1.4: https://www.amazon.com/HiLetgo-Control-Printer-Su..... Listed under: CNC Machines Projects

37. Motion Tracking Face https://youtu.be/Nqh3Ej8qfTU Meet Chartreuse! Chartreuse's face follows you when you walk by. When she sees you, her eyes turn yellow and she gets a happy expression in her eyes. As you walk away, her eyes change to blue and she sadly turns away. Chartreuse is powered..... Listed under: LED Projects

38. Steam Linked Display Shelf Back Story My brother has Funko POP figures that represent his characters that his friends play most often in video games. We thought that it would be cool if they had a display case that would have LEDs in it to represent their status on..... Listed under: LED Projects

39. Arduino Decoration There’s a lot of night lamps outside, but they can’t customize to your favorite color. So, this project is to make a night lamp that you can

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

40. 10 Million YouTube Subscribers Award LED PCB https://youtu.be/WhDgftYFQ5g Summary This PCB (Printed Circuit Board) resembles the YouTube Play Button award that is given out to creators for reaching certain milestones such as 100,000, 1 million, and 10 million subscribers. When the switch is turned on, the user can scroll through 5 different..... Listed under: LED Projects

41. Key Safe https://youtu.be/NLhxGl8CpGc During weekdays, I seldom bring my key out, but this causes difficulty when my mother left the house. By having no other choices, my mom has to leave the key inside the cabinet beside the door, which has no guarantee of whether the key..... Listed under: Security – Safety Projects

42. Iron Man's Arc Reactor That Pulses With Your Heart Beat https://youtu.be/bnX99E5VdHI There are lot of DIY arc reactors out there that look pretty cool. Some look realistic too. But why build something that just looks like that thing and does not do anything. Well, this arc reactor is not going to protect your heart using..... Listed under: Medical – Health based Projects

43. Secure IOT With AWS and Hornbill ESP32 Using Arduino. Security of connected devices is of paramount concern. There are several possible ways to make the devices secure. One of the most essential and widely used options is to use end to end encryption. The widely used Transport Layer Security (TLS) version 1.2 is the..... Listed under: Other Projects

44. ISS Globe- Blinks When the ISS Passes Overhead https://youtu.be/CFkH0GL3vdY Howdy! If you are interested in astronomy and always look up at the stars and not down at your feet, you'll surely know the ISS. The ISS or The International Space Station revolves around the earth around 16 times per day. Being an aerospace..... Listed under: Other Projects

45. Betta Fish Feeder I'm setting up a betta fish tank and wanted to make an automatic fish feeder so he never misses a meal. I've seen other DIY fish feeders that just shake a container but I wanted to be able to precisely control how much food he'll..... Listed under: Motor Projects

46. Cat Whisker Sensory Extension Wearable (2.0) This project is a continuation and reimagining of my former colleague's (metaterra) "Whisker Sensory Extension Wearable". The purpose of this project was to focus on the creation of novel, computationally-enriched "sensory extensions" that allow for augmented-sensing of the natural world. My major effort with this..... Listed under: Sensor – Transducer – Detector Project Ideas

47. How to Make an Arduino Weather Station With DHT11 Temperature and Humidity Sensor Recently I started playing around with DHT11 Temperature and Humidity sensor, at that time around, I had an idea to make a small yet effective Weather Station, so in this project inscructable, we will use the DHT11 sensor from the previous tutorial and turn it..... Listed under: Sensor – Transducer – Detector Projects

48. Alexa Controlled Dog Feeder This is our dog Bailey. She's part Border Collie and Australian Cattle Dog so sometimes she's smarter than her own good, especially when it comes to telling time and knowing when she should be eating dinner. Typically, we try to feed her around 6 PM..... Listed under: Medical – Health based Projects

49. Crocodile Solar Pool Sensor This instructable shows how to build a rather special pool sensor measuring the pool temperature and transmitting it via WiFi to Blynk App and to a MQTT broker. I call it the "Crocodile Solar Pool Sensor".It uses the Arduino programming environment and an ESP8266 board (Wemos..... Listed under: Solar energy projects

50. Monster Catcher Night Light https://youtu.be/iJaVelyJZwk This nightlight doubles as a trap to catch monsters under the bed! Before you go to sleep at night, place it under your bed and it will catch any monster under there. It even keeps a light on all night to make sure new..... Listed under: Other Projects

51. Infinity Gauntlet Controlled Home Automation https://youtu.be/-H7YejeUWbI In my previous project i have made an infinity gauntlet that control a light switch. I wanted to use six stones and each stone can control appliance, door lock, or lighting.So, I made a home automation system using infinity gauntlet. In this project I used..... Listed under: Home Automation Projects

52. Inverted Pendulum: Control Theory and Dynamics https://youtu.be/xwXPipYmJ9A The inverted pendulum is a classic problem in dynamics and control theory

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

53. Arduino Fireflies https://youtu.be/S8C5a9tcbgk One of the things I look forward to with summers in Pennsylvania are fireflies in my backyard. I recently taught myself Adruino programming for the purpose of making this simple project. It's a great program to start with and is easy enough for any..... Listed under: Other Projects

54. Unsafe Noise Level Alert System The Oshman Engineering Design Kitchen (OEDK) is the largest makerspace at Rice University, providing a space for all students to design and prototype solutions to real-world challenges. To serve this purpose, the OEDK houses a number of power tools and large machinery that produce loud,..... Listed under: Security – Safety Projects

55. How to Make a Self-Watering IoT Planter With a Mason Jar and an ESP32! Introduction: On one of my weekly pilgrimages to Lowes (as any devout Kansan does), I found a sad little plant in the Gardening Department: a Janet Craig Compacta. The poor little guy looked lonely and dehydrated. We clicked right away and immediately I knew I..... Listed under: Home Automation Projects

56. The Brachistochrone Curve https://youtu.be/1BdO8J0iynY The brachistochrone curve is a classic physics problem, that derives the fastest path between two points A and B which are at different elevations. Although this problem might seem simple it offers a counter-intuitive result and thus is fascinating to watch. In this instructables one will..... Listed under: Other Projects

57. DIY Geiger Counter With an ESP8266 and a Touchscreen https://youtu.be/rmFnbVB5gCM I designed and built a Geiger Counter - a device that can detect ionizing radiation and warn its user of dangerous ambient radiation levels with the all-too-familiar clicking noise. It can also be used when scouting for minerals to see if the rock you..... Listed under: Other Projects

58. ARDUINO PH METER In this project, we will be making a benchtop pH meter using the gravity analog pH circuit and probe from Atlas Scientific and an Arduino Uno. Readings will be displayed on a liquid crystal display (LCD). MATERIALS 1 - Arduino Uno 1 - Gravity analog pH sensor..... Listed under: Other Projects

59. Berry Racer – a Game Programmed in Arduino and Played on a Custom PCB https://youtu.be/C8IPaMl1wTk Berry Racer is a game that I came up with and programmed using Arduino's Software. The game is run on a Teensy microcontroller which is connected through a custom PCB (Printed Circuit Board) to a Screen, a Joystick, four buttons, and a piezo speaker..... Listed under: Game – Entertainment Projects

60. Upright Laser Harp https://youtu.be/_1oTBekbUT4 Laser harps are musical devices with laser beam "strings." When the beam is blocked, a note is played by the instrument. Usually laser harps have the beams travel vertically in the shape of a fan or vertical lines. In this project, I built a..... Listed under: Other Projects

61. The Simplest Buzzer Tutorial; Using Arduino https://youtu.be/pq3YFhjS-Wc Hey Makers, Lets make a Simple Quiz Buzzer using Arduino! Step 1: What We Can Do With It? What we can do with it? >Quiz Game Buzzer >Play Tunes and lots more..... Step 2: Things Required >Arduino Uno (Buy From Amazon.in) (Buy From Amazon.com) >Buzzer (Buy From..... Listed under: Other Projects

62. Arduino Bluetooth Car Controlled by Labview This is a Arduino RC car, originally based off of a project made by Owen_soo. It is very maneuverable, able to do quick turns, go backward and forward with just a flick of a switch. This was originally just going to be a very basic RC..... Listed under: Bluetooth Projects

63. DIY Smart Follow Me Drone With Camera (Arduino Based) Drones are very popular toys and tools these days. You can find professional and even beginner drones and flying gadgets in the market. I have four drones (quadcopters and hexcopters), because I love everything that flies, but the 200th flight isn't so interesting and starts..... Listed under: Video – Camera – Imaging Projects

64. RFID Door Lock With Arduino Here we are with the classic RFID door lock. It's classic in that whole, "We live in the future and take it for granted at this point" sense. In this tutorial, we will set up a door latch that can be opened with the swipe..... Listed under: Security – Safety Projects

65. Print Conductive Circuits With an Inkjet Printer This tutorial will teach you how to modify your average inkjet printer to be able to print electrically conductive

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

66. Arduino Solar Tracker (Single or Dual Axis) https://youtu.be/5KljnLkbgB4 If you've installed solar panels on a camper van to provide you with electricity on your camping trip or at home to supplement your electricity usage or take your home completely off grid then you probably know that the panels work the best when..... Listed under: Solar energy projects

67. Arduino Data Glasses for My Multimeter https://youtu.be/lkl6yVauCKg Video of the working device Trying to build a cheap Arduino Data Glasses for everybody. Why? I just wanted one. It's working, and now it can even help to avoid accidents. From the first idea to the working prototype, it took 4 Month The..... Listed under: Home Automation Projects

68. Make Your Own GPS SMS Security Tracking System In this project I will show you how to combine a SIM5320 3G module with an Arduino and a piezoelectric transducer as a shock sensor in order to create a security tracking system that will send you the location of your precious vehicle via SMS..... Listed under: Security – Safety Projects

69. Arduino Laser Harp A couple of weeks ago I presented my culmination project, framed laser harp, at New York City College of Technology. Work on it was so interesting for me, that I decided to share it here. I am an Arduino amateur and don't have any professional..... Listed under: LED Projects

70. Arduino Simple Memory Game This project is all about creating a simple game to test your memory. I'll be using a Teensy 3.0 board. (If you want to know more about this board please click here to read a Getting Started Guide). This project is also 100% compatible with the Arduino..... Listed under: Memory – Storage Projects

71. Motorized Pulldown Curtain (Phone & Radio Controlled) https://youtu.be/v0-TlGm9BxM I pull my curtain up and down a couple of times a day. If I watch a movie I pull it down and then, I pull it up to get better lighting. I also pull it down when I go to sleep and I..... Listed under: Radio Projects

72. Wearable Wireless Gesture Control With PHIRO Pro + Arduino + Pocket Code Smartphone App (JEDI MODE) Once again, here we are with another tutorial to "Awaken the Force" within you! With the new Star Wars movie just around the corner, we thought it would be fun to use the force to control PHIRO. In this tutorial, we will be using PHIRO Pro with Arduino along with some awesome..... Listed under: Wireless Projects

73. Arduino LED Matrix https://youtu.be/Eu9ExmHkkIk https://youtu.be/_srC_gPAEP0 In this short tutorial you will learn how to make an Arduino-powered LED matrix. Unlike several other designs, this one uses a "companion" computer to notify the Arduino which LEDs should be powered. I have provided the code for the Arduino, as well..... Listed under: LED Projects

74. Arduino Thermometer Its hot here in Los Angeles! Besides the massive drought California is in, Its not as cool around here lately. I wanted to build something to see just how hot it really was, and here it is! Read this instructable and Ill teach how you..... Listed under: LCD Projects

75. Lettuce for Life – Arduino 101 Based Automated Controller for Hydroponics, Aeroponics, Aquaponics, Etc. Intel Curie SUMMARY A device that can be used to control up to 4 different Hydroponic/Aeroponic Systems at once. The device will control the components of the system and will display notification to a LCD screen and allow the user to customize settings via Bluetooth. This system..... Listed under: LCD Projects

76. InstaKISS : Networked Picture Frames These frames are connected to the internet, which allows you to instantly send a kiss to a loved one. When my boyfriend and I were in a long distance relationship (for one and half years!), we communicated anyway that we could. We talked on the..... Listed under: Internet – Ethernet – LAN Projects

77. Make Your Own Motorized Camera Slider In this project I will show you how I repurposed two old camera tripods in order to create a motorized camera slider. The mechanical system consist mostly of aluminium and stainless steel which makes the slider sturdy and pretty decent looking. The electrical system consists..... Listed under: Video – Camera – Imaging Projects

78. Electromagnet Superhero Glove For a class assignment, I needed to make something fabric-based which took an Arduino, some programming, and at least two

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

79. Bionic Iron Man Glove One of our prime passions is to motivate the next great minds and ideas by posting informative step-by-step tutorials. To celebrate the launch of our fourth-generation muscle sensor, the MyoWare, we've revisited our most popular tutorial and simplified it down to just four major components! This Instructable..... Listed under: Sound – Audio Project Ideas

80. Arduino Voting Machine This instructable will teach you to build a simple Arduino based Voting machine using simple components such as push buttons and LCD. The highlighting feature of this system is that Serial Monitor in Arduino IDE is used to perform the polling operation no other external..... Listed under: LED Projects

81. DRS Oil Container An oil container that can automatically order new oil via Amazon DRS when the oil level in the container is low. Things used in this project Hardware components Arduino MKR1000 × 1 Ultrasonic Sensor - HC-SR04 (Generic) × 1 Jumper wires (generic) × 1 Software..... Listed under: Projects, Sensor – Transducer – Detector Projects

82. 8 Best Arduino Starter Kit for Beginners Best Arduino Starter Kit Arduino Starter Kit from Arduino Elegoo Uno Project Super Starter Kit with Tutorial for Arduino Vilros Arduino Uno 3 Ultimate Starter Kit SunFounder Project Super Starter Kit for Arduino Osoyoo Ultimate Starter Kit for Arduino with Mega2560 and UNO R3 Board..... Listed under: Development Board – Kits Projects

83. Alexa Controlled Door Sign Demo Use Alexa to tell your door sign what message to display. Things used in this project Hardware components Arduino MKR1000 × 1 Waveshare 200x200, 1.54inch E-Ink display module × 1 18650-Type Lithium Ion Battery (generic) × 1 18650-Type Battery Holder (generic) × 1 Breadboard (generic)..... Listed under: Projects, Wifi - WLan Projects

84. Liquid Laundry Detergent DRS Sensor (LaundryBot) Never run out of liquid laundry detergent again with this Amazon DRS enabled liquid laundry detergent sensor, a.k.a. LaundryBot. Things used in this project Hardware components Arduino MKR1000 × 1 Pololu VL6180X Time-of-Flight Distance Sensor Carrier with Voltage Regulator × 1 Adafruit Standard LCD -..... Listed under: Projects, Sensor – Transducer – Detector Projects

85. Did You Ever Want to Have a Video Doorphone? Recycle your old cellphone to build one and connect it by a browser to your new phone, PC or tablet! Things used in this project Hardware components Arduino MKR1000 × 1 ICStation UNO × 1 2.8 TFT Shield for Arduino Uno × 1 Breadboard (generic)..... Listed under: Home Automation Projects

86. Alexa, Put the Kettle On! Make a smart kettle for under £60 using Alexa and Arduino. Things used in this project Hardware components Arduino MKR1000 × 1 SparkFun Logic Level Converter - Bi-Directional × 1 Tefal Temperature Control Kettle × 1 Software apps and online services Arduino IDE Amazon Alexa..... Listed under: Internet – Ethernet – LAN Projects

87. Amazon Alexa Enabled USB Fan Amazon's Alexa is cool. USB fans are cool. Alexa enabled USB fan, even cooler. This fan turns on with a voice command to an Amazon Alexa device, "Alexa, turn [insert your name here]'s fan on". The fan is also set to turn off automatically after..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects

88. Amazon DRS Promise: Never Miss Coffee Break Again! Amazon Dash Replenishment Service Automatic coffee ordering robot using Arduino MKR1000. Never miss another coffee break again! Things used in this project Hardware components Ultrasonic Distance Sensor × 1 LED (generic) × 1 SparkFun Pushbutton switch 12mm × 1 Resistor 100 ohm × 1 Arduino..... Listed under: Projects, Robotics – Automation Projects

89. Connecting Anduino to IFTTT Connect your anduinoWiFi to IFTTT. Control everything around you, or 'let go' and let random events in cyberspace control your surroundings! Things used in this project Hardware components Arduino Due × 1 Arduino Zero & Genuino Zero × 1 Andium Anduino WiFi × 1 Software..... Listed under: How To – DIY – Projects, Wifi - WLan Projects

90. Knife Sharpening Angle Coach With Bluetooth & Arduino Precision sharpening skills aren't developed overnight! Here's a high-tech way to monitor your knife angle during sharpening, with the help of an absolute orientation sensor and bluetooth microcontroller. This project is a collaboration with Alex French Guy Cooking! This is an intermediate level Arduino project, so..... Listed under: Phone Project Ideas

91. How to Install LEDs Under a Scooter (with Bluetooth) Join me in creating ground effect lighting for my scooter using a bluetooth microcontroller and

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

92. how to measure home ac current 110v / 200v with arduino The cool thing about an ACS712 is that current is measured is measured in two directions. What this means is that if we sample fast enough and long enough, we sure to find the peak in one direction and the peak in another direction. With..... Listed under: Metering – Instrument Projects

93. Chinese Rings Puzzle With Arduino Introduction Hello all, The Chinese Rings Puzzle with Arduino is my version of a centennial Chinese puzzle. It is very simple to play and it is an example of a combinatorial puzzle, and lots of patience and concentration is required to solve it. The objective..... Listed under: Game – Entertainment Projects

94. Polar Heart Rate Monitor Interface + Arduino The following code and library are compatible with arduino software 1.0+ ONLY. You can download the newest version of the arduino software here. When you start to talk about biometrics in electronics, heart-rate is usually the first thing to come up. And why not? I..... Listed under: LED Projects

95. Sensing Capacitive Touch – MPR121 + Arduino Every now and then you get sick of the typical push buttons and you want something cooler. And what is cooler than touch sensitive things? Remember that old lamp in your Grandma's that changed brightness just by touching the base? Yeah, that's right... We are..... Listed under: Sensor – Transducer – Detector Projects

96. Bluetooth enabled Door locker using Arduino DIY Arduino based lockers can be found plenty in the internet where keypad was used to feed lock input. But this Bluetooth enabled Door locker uses Bluetooth as a medium to connect with the locker and your smart phone to feed input credentials. This locker..... Listed under: Security – Safety Projects

97. Remote controlled light effects using Arduino Christmas is just around the corner and its time to start planning things to lighten up this festive season. Today you are about to see building of Remote controlled lights with adjustable lighting effects using Arduino. The coolest thing about this project is controlling the..... Listed under: Other Projects

98. The Zambroombi: Roomba's Next Ultrasonic Competitor The Zambroombi is the next step up from your neighbor's fancy Roomba. Set it and forget it! "It changed my life. I don't know where I'd be today without it. I used to just have to clean everything once, but thanks to The Zambroombi, I..... Listed under: Other Projects

99. Make Your Own GPS Transmitter with the HC-12 Transceiver The initial part of this series, titled Understanding and Implementing the HC-12 Wireless Transceiver Module, demonstrates using HC-12 for long-range data exchange between two Arduino Unos. This article utilizes two HC-12 transceivers, a GPS module, an Arduino, and Google Maps in order to develop a..... Listed under: GPS Based Projects

100. The Santa Cam! An Arduino PIR Motion-Activated Camera System The Santa Cam is sure to catch who is stealing your milk and cookies this holiday season! You can even use it for a photo booth this New Year's Eve! BOM: Arduino Uno DSLR camera with remote shutter jack 2.5mm TRS cable Rectifier diode Milk..... Listed under: Other Projects

101. DIY Arduino Tutorial: How to Automate Your Curtains This Arduino Curtain Automation project will let you automate your curtain blinds using just an Arduino and a stepper motor. I just moved to America pursuing my higher studies. Because my dorm is very dark, I wanted to brighten up my room when I wanted..... Listed under: Other Projects

102. Create a Christmas Light Show with Arduino The Christmas light show with Arduino is a project that controls a number of lights according to a song in sync with the music. It can be used to control stage lights and fog machines (that don't have DMX) with a computer to achieve wonderful..... Listed under: Other Project Ideas

103. Arduino Servo Catapult: DIY Catapult using Arduino Use an Arduino and a servo to shoot food to your cat! (Also works with other animals). Check out the video below to see how this Arduino Servo Catapult works. While maybe not the most practical application, this project will teach you the basics of servo motors..... Listed under: Other Projects

104. Arduino Wheelchair Project: Motorized Controller Mount This was an Arduino wheelchair project we developed for Principles and Practices of Assistive

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

105. Amazon Kitchen DRS The Project This project is a combination of the many smart fridges and pantry's of the past. The idea is to combine all of them while also introducing Amazon's DRS system through Alexa and the Echo products as a bonus feature. The process will be…... Listed under: Other Projects

106. Build A Speech Controlled Quadropod Using Arduino This is my first post on Instructable and I am super excited to share my knowledge! My original robot post is here: Spryo SpoonTail which is just my robot showing some tricks but with a tethered control. In this Instructable I am going to show…... Listed under: Bluetooth Projects, Robotics – Automation Projects

107. Daox's diy arduino thermal differential controller We have a great thread that contains lots of info on thermal differential controllers here. However, I wanted to start a thread dedicated to my own development of a thermal differential controller that I'll be using for my attic heat reclamation project. Tonight I setup…... Listed under: Sensor – Transducer – Detector Projects

108. DIY Thermal Differential Controller – Part 4: Building Your Own In our last episode, I explained how I redesigned the controller from what I first thought I was going to do. Now, I am going to explain how to make your own thermal differential controller based on mine. As it is, this setup will only…... Listed under: How To – DIY – Projects

109. The LCDuino-1 I/O processor News - April 25, 2010: All future announcements and updates for the LCDuino-1 and related app modules (δ1 relay-based attenuator, δ2 relay-based input/output selector, and others) have moved to the new AMB DIY audio forum. We have an entire forum category dedicated to the LCDuino…... Listed under: LCD Projects

110. Fun With The Arduino Esplora: A Digital Picture Frame With this article I kick off my series on the Arduino Esplora board. Today's project is a nice (and cheap!) little digital picture frame that uses the Esplora's TFT Screen add-on. Materials Needed In this section you will find the materials that you need to…... Listed under: LED Projects

111. Make a swimming Robo-Snake Using Arduino Sneel is the name of my snake / eel swimming robot. This is documentation of hardware, software and mechanical design of Sneel_003. urethane flex tubing, microcontrollers, Zigbee wireless radio, hose clamps, wires, servo motors, titanium servo brackets, silicon, marine grease, epoxy, pond pump Sneel is…... Listed under: Robotics – Automation Projects

112. Arduino-Controlled Robotic Drum For years I have been telling anyone who listens that I was going to build a robotic drum. Most people kind of shrugged indifferently. Even as I built it, most people kind of glanced over at it and conveyed doubtfulness. It seemed like no one…... Listed under: Robotics – Automation Projects

113. Sigh Collector Sigh v. i. [imp. & p. p. {Sighed}; p. pr. & vb. n. {Sighing}.] 1. To inhale a larger quantity of air than usual, and immediately expel it; to make a deep single audible respiration, especially as the result or involuntary expression of fatigue, exhaustion,…... Listed under: Other Projects, Phone Projects

114. Automatic Garden Watering Device – Arduino As part of the Content Creation course for my MLIS degree (Our class blog: http://scumakers.wordpress.com/), I needed to come up with a final project and wanted to learn to use an Arduino. In the end I came up with this device to automatically sense…... Listed under: Home Automation Projects

115. Project Suite Bros: Voice Activated LED Friendship Photoset (Arduino, Bluetooth, Crafts) (and partner-in-crime, Abbie). Now, I'm off to the next stage of my life, so I decided to build this friendship photoset for Kevin and Briton to remember our golden era. We called ourselves: "The Suite Bros". This project is actually an extension of the "Voice…... Listed under: LED Projects

116. Arduino Garage Controller Although there are many garage door projects on Instructable using Arduinos, I needed/wanted something different. Last year, we had a warm summer and when I would come home after work, I would leave the garage door open about 1 foot so it could cool off…... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects

117. The Arduino Mothbot The purpose of this project is to design and build a simple light-following robot using an Arduino Duemilanove microcontroller board. I

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

118. How to Connect and Read a Keypad with an Arduino n this project, we will go over how to integrate a keyboard with an arduino board so that the arduino can read the keys being pressed by a user. Keypads are used in all types of devices, including cell phones, fax machines, microwaves, ovens, door..... Listed under: Development Board – Kits Projects

119. How to Build a Motion Sensor Light Circuit with an Arduino In this project, we will go over how to build a motion sensor light circuit with an arduino. A motion sensor light circuit is a circuit in which a light turns on when motion is detected. With a PIR motion sensor integrated with an arduino,..... Listed under: Sensor – Transducer – Detector Projects

120. Make A Touch-less Switch Using Arduino Arduino Project – Touch Me Not I modified the Arduino project from the Arduino Starter Kit (Touch Sensor Lamp). Now it lights up an LED when your hand is close on the aluminium foil (without even touching it). This can be used as a 'Touch-less..... Listed under: Sensor – Transducer – Detector Projects

121. Make an Ultrasonic Distance Calculator Arduino Project – The distance calculator I have been playing with Arduino (micro-controller) for about 2 years now and I am becoming more and more passionate about circuits. For those who are not aware of Arduino, check out my article "Arduino – A Guide for..... Listed under: Calculator Projects

122. Use Arduino to Interface with a Remote Controlled Power Switch Update: check out the RFToy — an easy-to-use standalone gadget to control remote power sockets. Also, support for remote power sockets have been added to OpenSprinkler firmware 2.1.1. For a while I've been looking for a way to switch household power line (110V) devices. One of the simplest..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects

123. Automated LED stairs using arduino After seeing the lovely LED stairs at interactivefurniture.de, I decided to make my own, open-source version. Here is a video of them in action. I am not an expert videographer and cannot do the stairs full justice, but they came out exactly as I wanted..... Listed under: Home Automation Project Ideas

124. Control Your Robot Using a Wii Nunchuck (and an Arduino) using arduino After wearing myself out playing Wii Boxing I got to thinking wouldn't it be great if I could use this to control my robot, (looking to my left hand). Looking around the internet I found a bevy of people doing similar things, (links to everyone..... Listed under: Robotics – Automation Projects

125. Control a RepStrap with Processing using arduino This instructable shows how you can use many openly available projects together to build an interesting and complex system. It draws on several community projects including: RepRap, Arduino, Processing, Linux and, of course, Instructables! More specifically this intructable shows how to draw the path of..... Listed under: CNC Machines Project Ideas

126. Make a wall avoiding Robot! using arduino Objective: To create from scratch a working robot that is able to avoid walls and obstacles. Ever wanted to make a robot that could actually do something, but never had the time or knowledge to do it? Fear no more, this instructable is just for..... Listed under: Robotics – Automation Project Ideas

127. PUPPET CONTROLLER using arduino Three kinds of motion: Human, Mechanical, Animation. Blend them together to build a puppet controller for the real and virtual world. Or, Pacman - three ways. This Instructable includes: - Using an adjustable resistor as input to the Arduino Micro-controller - Controlling two servo motors from..... Listed under: Game – Entertainment Project Ideas

128. How to Build an Arduino Powered Chess Playing Robot using arduino Judging by the sheer number of chess related Instructables, I think it's safe to say the community enjoys the game. It can be difficult, however, to find someone who plays on the same level you do. To solve this dilemma, and to increase my playing..... Listed under: Robotics – Automation Project Ideas

129. AlarmingTweet Using Arduino This project will add tweeting capabilities to the GE 45142 Choice-Alert Wireless Control Center Alarm system. The alarm system allows you to connect up to 16 different sensors across 4 zones and with the addition of the Arduino powered Alarming Tweet you can enable it..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects

130. Arduino ArduRoller balance bot Caveat Emptor: (I don't want to put you off building one but I also don't want you to be disappointed.) This Instructable is now

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

131. LASER Maze – Halloween Haunted House using arduino The LASER Maze was our Processing and Arduino powered garage haunted house for 2011. A monitor sits outside of the garage, displaying "PRESS START." After the button is pressed, an intro video plays that instructs you to dodge the lasers and get your candy in..... Listed under: Sensor – Transducer – Detector Project Ideas

132. USB Biofeedback Game Controller using arduino Building upon our last tutorial, which taught you how to build a muscle sensor, we've decided to give you a project that really showcases the power of our muscle (EMG) sensors. Advancer Technologies' "USB Biofeedback Game Controller" harnesses the power of electromyography to allow players to..... Listed under: Game – Entertainment Project Ideas

133. Sugru + Servos = Robot using arduino Build a robot using a bag of Sugru and 5 mini-servo motors. Motivation:Build a robot using very few parts and very cheap servo motors. Steps: Parts list Build Wire Program Play! Outcomes of this project: Robot with 5 joints Arduino Code which is expandable Control..... Listed under: Robotics – Automation Project Ideas

134. Airmonica – a free-air musical instrument improvise + harmonize + customize The airmonica is a easy-to-learn tweakable musical instrument that you can use to perform harmonic musical ditties by accompanying a tri-tone arpeggiator. There are endless opportunities to expand the airmonica in any way that will make it your your own..... Listed under: Sound – Audio Projects

135. Arduino Thermostat with TC74 sensor Hello all! This is a quick guide on how to use an Arduino© to control whether a cooling fan and a heater is turned on depending on the detected temperature from a TC74 Arduino sensor. This is for a final project for an Electronics class..... Listed under: Sensor – Transducer – Detector Projects

136. DIY Amp / Watt Hour Volt Meter – Arduino Major corrections and additions made 9/9/2014 For my off-grid Ham Radio and Solar projects, I needed a way to measure volts, amps, watts, amp hours and watt hours. There's a couple of commercial products that can do this, but not with the flexibility I wanted..... Listed under: How To – DIY – Projects, Metering – Instrument Projects

137. Hack Your Hasbro R2D2 With an IOIO Microcontroller My wife bought me a Hasbro Interactive R2D2 Astromech Droid for my birthday a few years ago after I said how much fun it would be to hack it and I've finally managed to get inside and start playing!Although the built-in voice control functions are..... Listed under: Robotics – Automation Projects

138. Arduino PCR (thermal cycler) for under $85 This tutorial will show you how to make a thermal cycler from scratch for about $85. In short, PCR (polymerase chain reaction) amplifies bits of DNA, creating millions of copies of a target sequence. You can use it to test a DNA sample for a..... Listed under: How To – DIY – Projects

139. SPEAKR (Singing Portable Electronic Arduino Kite – Remix!) Nature has a way of speaking to us in a way that soothes and revitalizes. Sounds of the wind in various places create low volume tones that we barely hear. They have a certain beauty and randomness to them that are unique to nature. We've..... Listed under: Game – Entertainment Projects

140. Send and Receive MIDI with Arduino This instructable will show you how to use an Arduino to send and receive a variety of MIDI messages so you can start building your own MIDI controllers and instruments. First I'll talk a little bit about MIDI protocol, if you're just looking for sample..... Listed under: Sound – Audio Projects

141. Make Your Hat With Full Of Stars Using Arduino Top hats are cool; just like bow ties. Not only are they stylish, but they give you a lot of room for incorporating techno goodness. I recently had cause to buy a tuxedo, which necessitated a kilt, and then a top hat. You know how..... Listed under: Game – Entertainment Projects, Home Automation Projects

142. HandSight: A Glove for the Blind to Feel Shapes and Navigate Obstacles HandSight is a prototype glove to aid the blind. It can sense the lightness or darkness of a surface with tactile feedback from a vibration motor for each individual finger. It can also sense distance from physical objects or obstructions and indicate direction and distance..... Listed under: Medical – Health based Projects

143. Paint Pulse: Digital Water Marbling Paint Pulse is a project which seeks to build upon the water marbling crafts of Ebru and Suminagashi with

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

144. Traffic Signal / Stop Light Wiring with Arduino Controller I always wanted an old traffic signal and finally got one recently. However, it was very simply wired so that all the lights were fixed on. What fun is that? I also wanted to try out an Arduino controller and thought this would be a..... Listed under: Other Projects

145. Earth Globe Rotating With Arduino Or Raspberry Pi Controlled Stepper Motor using arduino This instructable describes how to upgrade your globe to a motorized version. It looks amazingly better on the shelf when it is slowly rotating, and any demonstration with your kids (to explain the day/night cycle or the seasons) will gain in interest. No need to..... Listed under: Motor Projects

146. Arduino Powered 3-zone thermostat I was looking at all those swoopy-zoomy internet connected and controllable thermostats. "Self," I told myself, "we should make one of those." He didn't seem all that excited about that - I mean, what do we know about hardware, firmware, electronics or HVAC? Well, now's..... Listed under: Temperature Measurement Projects

147. Intermediate Arduino: Inputs and Outputs using arduino Continuing from my Intro to Arduino post, this Instructable will go over some slightly more advanced topics with Arduino, specifically relating to controlling and managing many inputs and outputs. The next class covers how to connect the Arduino's inputs and outputs to MIDI. Parts List:..... Listed under: LED Projects

148. Universal Remote Laser Tag Using Arduino Blast away your friends for hours on end with this custom laser tag system. Who needs to pay to play in an arena when you can make your very own game? Best of all, no special equipment is required, because the "guns" are regular universal..... Listed under: Game – Entertainment Projects

149. Beginner Arduino The Arduino is a pocket-sized computer (also called a "microcontroller") that you can program and use to control circuits. It interacts with the outside word through sensors, leds, motors, speakers... even the internet; this makes it a flexible platform for lots of creative projects. Some..... Listed under: Development Board – Kits Projects

150. Arduino, Sensors, and MIDI Now that you're up to speed on using Arduino's inputs and outputs, this Instructable will give you everything you need to get started using sensors to trigger MIDI notes from Arduino. This post is the last installment in a series of workshops I led at..... Listed under: Home Automation Projects

151. Sugarcube MIDI Controller Using Arduino This project is a portable, Arduino-powered, grid-based MIDI controller that boots up into a variety of apps to do lots of things with sound. It has 16 backlit buttons, used as both inputs and outputs to give the controller some visual feedback. 2 potentiometers give..... Listed under: LED Projects

152. Build a Controllable Coffee Roaster from an Air Popcorn Popper I have a passion for coffee. I also have a passion for electrical engineering. Why not combine them? This Instructable describes how I transformed a hot air popcorn popper into a completely controllable coffee roaster! Follow these instructions to re-purpose and hack your West Bend..... Listed under: Home Automation Projects

153. Sound Reactive LED Strip Using Arduino THERE MAY BE 9 STEPS BUT I PROMISE THIS ONE IS QUICK AND EASY! In this Instructable I will be showing you how to create a light reactive LED system. In this clip, I used a single color LED strip, but you you can use..... Listed under: LED Projects, Sound – Audio Projects

154. LilyPad Arduino Sensor Demo Mat This tutorial shows you how to create a sensor demo mat for the LilyPad Arduino. I wanted a place where I could experiment with the different sensors, but also something that I could use to show examples of what can be done without constantly uploading..... Listed under: Sensor – Transducer – Detector Projects

155. Brushless Gimbal with Arduino This is a Spring 2014 Electronics project at Pomona College created by Andreas Biekert and Jonah Grubb. Thanks to Professor Dwight Whitaker, Tony Grigsby and the Pomona Physics Department. Our goal with this project was to create a 2 axis brushless gimbal controlled solely by..... Listed under: Video – Camera – Imaging Projects

156. Motion Sensing Digital Camera & Alarm using Arduino Welcome to my instructable on how to make an Arduino-controlled motion sensing camera and alarm!

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

157. Smartphone controlled Arduino tank using Annikken Andee Hi guys, I am Robin, one of the developers of Annikken Andee. Just a few weeks back we were invited to be a part of Arduino Day Singapore 2014. On the day of the event, we showcased a missile-firing lego-crushing smartphone controlled Tank built using..... Listed under: Phone Projects

158. Hack an old iPod using an Android and an Arduino This tutorial shows you how to use an Arduino to turn that old dusty music player into a Bluetooth controlled docking station. Even if it has a cracked screen or a dead battery it can still be used. The following instructions will show you how..... Listed under: Arduino Android

159. Bass Master 3000 Carnival Game using arduino The Bass Master 3000 is a game that I built for a work carnival along with a small and very talented team of co-workers. I've seen this type of game on the net, but I wanted to kick it up a notch with some Arduino..... Listed under: Game – Entertainment Projects

160. Build your own 4x4x4 RGB LED Cube using arduino LED Cubes are awesome. The first one I created was a 8x8x8 blue led cube. It still works like a charm. But being able to display every colour in the spectrum is much more spectacular. Let's start with a small and simple 4x4x4 RGB LED..... Listed under: LED Projects

161. DIY FPV RC Tank V2 [2km RANGE upgrade!] using Arduino Lets build An FPV tank that could be controlled within 2 kilometers! With the help of my best friend ASCAS I was able to borrow his old parts for this updated version. Ok So Roverbot version 2 is a highly educational Arduino based ATV-drone. It's..... Listed under: Game – Entertainment Projects

162. DIY GPS Tracked Bike Lock using Arduino Having just purchased a half decent bicycle, and living in a city with a bike theft rate almost as high as New York, I wanted to have some peace of mind that if a thief with an angle grinder were to cut through my U-lock..... Listed under: Car Projects, GPS Based Projects, Security – Safety Projects

163. Critter Twitter Trap using Arduino Havahart traps are really nice if you have pests to rid your home of but you don't feel the need to do this through means of killing the animal. The problem we are faced with is constant monitoring of the trap. If you forget to..... Listed under: Internet – Ethernet – LAN Projects

164. Laser Cut Sphere-O-Bot using Arduino The Sphere-O-Bot is a simple 2 axis CNC machine that can draw on most spherical surfaces. You can use it to decorate ping pong balls or eggs.This design is based on the 3D printable Sphere-O-Bot. By building your Sphere-O-Bot using a laser cutter, you can..... Listed under: Robotics – Automation Projects

165. Arduino Powered Autonomous Vehicle A few months back I started playing around with Arduino micro controllers as a learning exercise (and for fun); this project is the culmination of that. The goal of the project was to create a vehicle that can autonomously navigate through a series of waypoints..... Listed under: Car Projects

166. Simple Basement Security System using Arduino In this project I will show you how to build a very simple security system for all kinds of rooms. It might be simple but still effective. It is based around an Attiny85 and uses a reed switch and a key switch as inputs to..... Listed under: Security – Safety Projects

167. NFC Ring Lock Box using Arduino Hi everybody! Welcome to my first instructable! I apologize in advance for my poor level in English. In this step-by-step guide I am going to teach you how to build a simple and very cheap NFC Ring Lock Box ! Step 1: What you'll need..... Listed under: Security – Safety Project Ideas

168. Hacking my RC Car using Arduino and Android Smart Phone Have an old toy car? I hacked mine using Arduino and an H bridge circuit to control the motors, used my Sony Z1 Android phone to control it with the recent 1Sheeld I got from Kickstarter. I thought to use the Gyroscope sensor in to..... Listed under: Arduino Android, Car Projects, Phone Projects

169. 4x4x4 LED Cube (Arduino Uno) In this tutorial I'll show you how to make a 4x4x4 LED cube for around $15.00. The cube has 64 green LEDs which make up it's 4

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

170. DIY navigation device for blind people using Arduino and Android smart phone In this project you can cover your eyes and let your smartphone navigate you to avoid obstacles, the application is mainly a DIY navigation device for blind people. I knew that 1Sheeld is about to launch a new text to speech shield, and so I..... Listed under: Arduino Android, Home Automation Projects, How To – DIY – Projects, Medical – Health based Projects, Phone Projects

171. Word Clock in German using Arduino While in Germany last year, I saw a world clock in a store similar to this one in a store that was priced at 900€. I read several instructables online on how to create a World Clock so I decided to give it a shot..... Listed under: Clock – Timer Projects, Home Automation Projects

172. Pimp My Zoomobil using Arduino I recently put together the Playmobil Zoomobil for my kids. As I was busy snapping all the pieces together, I became more and more convinced that this cart had been made to have lights. It's hard for me to believe the original product designers at..... Listed under: Game – Entertainment Projects

173. Smart Homer Web-enabled TV remote using Arduino Smart Homer, a Web-enabled TV remote puppet Smart Homer is a Web-enabled puppet that turns on your TV when Simpsons is on. As Homer is too lazy to browse the Web himself, a script in the cloud checks the online TV program for him. If..... Listed under: Home Automation Projects, Internet – Ethernet – LAN Projects

174. Arduino-Based Blue Box (Phone Phreaking) History and Story In the 1950s, 1960s, 1970s, 1980s and even up into the 1990s phone phreaking was an amazingly cool way to explore an unknown world of phone switching networks. To "phreak" a telephone switch, can be done by using frequencies, or tones to..... Listed under: Phone Projects

175. Home Automation: Drapes using Arduino Hate having to manually open and close your drapes? Hate getting back from work/school and your room is dark and dreary? Do you want curtains that open and close themselves? Then you need Dr. Drape! Dr. Drape is an easy DIY project using an Arduino..... Listed under: Home Automation Projects

176. Programmable Temperature Controller + Hot Plate Heating things up is one of the most performed tasks in a lab. Quite a lot of times it is not enough to simply hold something at a certain temperature, but the rate at which something is heated and for how long is just as..... Listed under: Arduino Programmer Projects, Metering – Instrument Projects, Temperature Measurement Projects

177. Beach Buddy: 3-in-1 Solar Phone Charger, Boombox, and Sunburn Timer Calculator Imagine the ideal beach trip. The sun is shining, the skies are blue, the water is warm, and the humidity is low. You and your friends have everything you need to soak up the sun, sand and surf: a cooler filled with drinks and snacks,..... Listed under: Battery Projects, Solar energy projects

178. Interactive Stereoscopic Installations: visual rupture with the Diplopiascope What is it? This is an ongoing project that i've been working on to see the potential of interactive stereoscopic installations in examining the perceptual process. I use a setup that i've called a Diplopiascope to investigate this. The Diplopiascope has gone through a few..... Listed under: Video – Camera – Imaging Projects

179. DinoCalc Version 1.0 (Arduino Pro Mini Protoboard Version) Latest Release: http://code.google.com/p/dinocalc/ Development: https://github.com/WeaselJones/DinoCalc This is a calculator without a LCD that tells you if your math answer is right or wrong, without giving you the answer. This instructable will show you how to make this simple math checking..... Listed under: Calculator Projects

180. FuzzBot The FuzzBot is an awesome, fast, fully autonomous small Arduino robot that everyone loves!!! It uses the compact Pololu ZumoBot Chassis kit for a great drive system, and uses a Parallax Ping sensor to sense proximity, to make the FuzzBot fully autonomous. I like to..... Listed under: Robotics – Automation Projects

181. Qtechknow Robot Obstacle Course using Arduino Have you ever thought of controlling your FuzzBot wirelessly? Do you want to make a real - life video game? Do you want to learn about the tech behind NFC and RFID? - the Qtechknow Robot Obstacle Course How - To Guide is for you!..... Listed under: Robotics – Automation Projects

182. Making the TFF: a dress that gets excited when tweeted The idea of this dress comes from a series of tweets with online friends @shineslike and @arduinogirl.

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

sensory and interactive opportunities..... Listed under: Game – Entertainment Projects, Home Automation Projects, Internet – Ethernet – LAN Project Ideas, Sound – Audio Projects

183. Your Image on an Arduino! – TFT LCD Screen Guide Have you ever heard of TFT LCD screens? They are great ways to display information from your Arduino, or display pictures. The Arduino team just released an official TFT LCD screen with their new Robot at Maker Faire 2013. It's very easy to get started..... Listed under: Video – Camera – Imaging Projects

184. 3D Printed Arduino Controlled Eggbot/Spherepot First off this project was a combination of of two great online resources. I had been looking into building an eggbot for a while and since I had a lot of ping pong balls on hand after one of my other videos the time was right for..... Listed under: Robotics – Automation Projects

185. Arduino-controlled RGB LED Infinity Mirror Update 11/22/2013: Thanks to everyone who voted for this project in theMicrocontroller Contest! It was one of three first-prize winners. Update 9/17/2013: Thanks to everyone who voted for this project in the Arduino contest (I was one of ten "second prize" winners)! If you want to try..... Listed under: LED Projects

186. Bluetooth Weather Lamp This was a 2 hour project I whipped up in order to learn how to use a new Bluetooth LE 4.0 module I picked up at redbearlab.com, called a BLE Mini. I've since thought of several much simpler ways (and more dependable) to accomplish the..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Project Ideas, LED Projects

187. LED Shoulder Pads For this project, I was inspired by my best friend. She had been wanting some disco-fabulous armor-inspired wearable technology for music festivals and costume parties for some time. I took a pair of construction/gardening knee-pads and turned them into glitterific shoulder pads that shine bright..... Listed under: LED Projects

188. DIY Skee Ball Machine The skee ball machine is a wonderful thing. The simple experience of rolling a ball into a target is so freakishly satisfying that I used to play as much as I could as a kid at the local amusement park/mini-golf course. The sound of the..... Listed under: How To – DIY – Projects

189. Homemade Arduino Friendly Pulse Sensor I saw the Open Hardware Pulse Sensor at thought I'd try to make it at home. Took me awhile, but here's my bumbling process. Step 1: Pulse Sensor -- Overview I've been working on re-making the the Open Hardware Pulse Sensor so it'd be "easy" to send off to..... Listed under: Medical – Health based Projects, Sensor – Transducer – Detector Projects

190. How to Create an Arduino Compatible Bluetooth 4.0 Module I had been looking for a cheap alternative to some of the Arduino Bluetooth devices I'd seen, which in my opinion are overpriced. Redbear's Mini: $39.95 (Note: This is a uC and BLE combo). Redbear's Uno Shield: $29.95 BLEDuino: $19.95 (if part of Kickstarter) Bluegiga..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects

191. DIY Robotic Hand Controlled by a Glove and Arduino This project idea came to me when I was sitting on a bed on a hotel room on vacation. I thought: "It'd be really neat to have a robotic hand that I can control with my own hand!" Upon returning home, I embarked upon a..... Listed under: Robotics – Automation Projects

192. BARC Jeep – An XBOX Controlled Power Wheels Make a power wheels jeep that is controlled by an XBOX controller. This particular build is using Power Wheels® Jeep® Hurricane with Monster Traction™ but should be usable across many different types of power wheels with small adjustments. I wanted to do this project so I could..... Listed under: Car Projects, Game – Entertainment Projects

193. Make A Multitouch Music Controller Using Arduino This project is an Arduino-powered infrared touchscreen / coffee-table interface that I've been using to control various music and graphics applications on my computer. This is an old project that I've recently had time to go back and document/fix up; this project is a little..... Listed under: LCD Projects, Sound – Audio Projects

194. Make A Worms in Space Board Game Using Arduino Story: NASA has taken worms to the ISS on their own special capsule. There was an accident aboard the station and the worm astronauts have to navigate to the escape capsule to return to Earth. The airlock to the escape capsule has been damaged but..... Listed under: Game – Entertainment Projects

195. Make A Low Cost LED Grid Using Arduino There are a number of great Instructables on LED grids out there. This is a low cost version - not quite as polished,

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

196. Aqua Garduino Mini @hydroFishAqua82 Arduino Powered Micro Aquaponic System with Pi Camera and Twitter Feed We are creating an automated aquaponic system with mobile updates via Twitter. Sensors and motors will be controlled from an Arduino while the entire system, including mobile updates, will be orchestrated by a Raspberry…... Listed under: Home Automation Projects

197. RGB LED Color Selector / Picker / Chooser One Challenge with working with RGB LEDs is getting the right Red, Green and Blue values to match a color you are trying to display. You can start with web colors, and then sometimes need to adjust them since the LEDs don't look quite the…... Listed under: LED Projects

198. Light Painters Palette aka Light Box Today I'm going to show you how I made my "light painters palette" aka light box. If your into electronics and photography than this is probably something you are going to like. Supplies: -Arduino (I'm using a arduino pro mini which requires a ftdi basic to program,…... Listed under: LED Projects, Video – Camera – Imaging Projects

199. Arduino-Controlled Chemical Foam Spewing Pumpkin If the thought of dozens of tricker-or-treaters in gross-out costumes knocking down your door makes you want to spew, have we got the pumpkin for you! Every time the Arduino-Controlled Chemical Foam Spewing Pumpkin encounters a trick-or-treater at your doorstep, it spews burning chemical foam…... Listed under: Game – Entertainment Project Ideas

200. How to Program the Vexplorer Using Arduino This instructable will be about using arduino to control the revell vexplorer. Later you can add as many sensors you want. If you don't have most of the parts already this will cost you about $200 dollars. Most of the electronic bits you can find…... Listed under: How To – DIY – Project Ideas, Ideas

201. Tilt Sensing Bracelet using Arduino A bracelet decorated with six conductive fabric petals and a thread of beads with a metal bead at the end, makes for a simple six point tilt detection. It is also designed so that the metal bead will make contact with two petals if it…... Listed under: Ideas, Sensor – Transducer – Detector Project Ideas

202. Twitter garage door using the GE Choice ALERT system & Arduino You know that feeling of driving away from your house almost getting to work and saying "Now Did close the garage door?" . I hate that feeling and seeked out to resolve it in the smiplest/cheapest way I could. The starting point was of course…... Listed under: Home Automation Project Ideas, Ideas, Internet – Ethernet – LAN Project Ideas, Security – Safety Project Ideas

203. Analog VU meter and Clock using Arduino This project brings back the old time Analog VU Meter, with the added functionality of a neat looking clock! When you turn off your music the meters automatically swing into to clock mode. Behind it all is the popular and easy to use Arduino. This…... Listed under: Calculator Projects, Metering – Instrument Projects, Projects

204. Quiz Game Controller using “Lights and Sounds Buzzers” and Arduino Jeopardy style quiz games are favorites for creating excitement and educational instruction at the same time. Teachers, summer camp counselors, and even industry educators find this type of game to help generate interest and involvement from the participants. The idea behind the game is simple,…... Listed under: Game – Entertainment Projects, LED Projects, Projects, Sound – Audio Projects

205. Audio Input to Arduino The easiest way to connect an audio signal to your arduino, is to build a simple 3 components (2 resistors plus cap) circuitry shown on the first drawings on right side. Disadvantage: there is no amplifier, and consequently sensitivity would be low, hardly enough to…... Listed under: Projects, Sound – Audio Projects

206. ARDUINO Laser 3D Tracking or Range Finder The idea of using triangulation for distance measurements is well known since Pythagorean time, when his brilliant formula become available for mathematicians. What is new in this design, is lasers power control via “blooming” effect of CMOS camera. Here this “negative” effect was put to…... Listed under: Metering – Instrument Projects, Projects, Sensor – Transducer – Detector Projects

207. Audio VU meter with Extra wide Dynamic Range 69 dB using Arduino O’K, after having some fun with stereo version of the VU meter I described in my previous blog-post, now it’s time to do a serious stuff. Studio grade VU meter !!! 24 steps, equally spaced every 3 dB, covering Extra wide Dynamic Range from -63 up to…... Listed under: Metering – Instrument Projects, Projects, Sound – Audio Projects

208. Spectrum Analyzer, Arduino project with FFT algorithm The basic idea was to create color organ / spectrum analyzer on arduino board, trying to minimize

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

209. Combo Blocks using an Arduino Project by CU Boulder Thinks That Think students: Michelle Bourgeois, Charles Dietrich, and Ben Link Imagine having a safe in which the combo is any small object of your choosing. Perhaps it's your favorite coffee mug, or a bat man figurine. This project is based..... Listed under: Home Automation Projects, Projects, Security – Safety Projects

210. Arduino Touch Screen Room Control Hey everyone, I finally finished my touch panel for my bedroom wall and am here to show you how i made it. Unfortunately its not installed in my wall yet as I might be moving and don't want to make anymore holes in my walls,..... Listed under: Home Automation Projects, Projects

211. Bug-Catching Spider in Web using Arduino Part 2 This project is a collaboration between idesigner4 and bhasudha(me), students in the Fall 2012 course Things That Think (CSCI 7000) at The University of Colorado - Boulder. The story of our bug-catching spider automaton goes like this: A giant evil spider resides in a big..... Listed under: Internet – Ethernet – LAN Projects, Projects, Security – Safety Projects

212. Arduino R/C Lawnmower What this is: This instructable will show you how to make your Arduino into an R/C interface that you can use for just about anything requiring remote control. I will also show you how I built an R/C lawnmower using my Arduino, a cheap R/C transmitter and..... Listed under: Home Automation Projects, Projects

213. Plantduino Greenhouse using an Arduino This summer I wanted to combine my two loves of plant science and engineering. Thus I am constructing my very own greenhouse in my backyard. I am an undergrad, and as any former student knows, this means I move around constantly, and I am not..... Listed under: Home Automation Projects, Projects

214. Motion Triggered Fog Machine using an Arduino Fog machines can be unruly beasts. Especially the non-professional models you buy for halloween. With low duty cycles, causing massive amounts of fog when you don't need it, and no fog when you do. Wouldn't it be nice to have fog only when people come..... Listed under: Other Projects, Projects

215. Turn your Arduino into the best gift of all Please vote for me in the Holiday Gift contest and the Make it Glow contest! First, this started out as a gift, and not an instructable. So please excuse some hand waving here and there as I do not have any pictures of the etching and drilling portions. Second,..... Listed under: Game – Entertainment Projects, Home Automation Projects, Projects

216. Interfacing a Digital Micrometer to a Microcontroller We had a project that required connection to a digital micrometer with a data output jack. The idea was to connect a microcontroller to the micrometer, to read the measurements and make decisions based on the readings. The micrometers that we used are made by..... Listed under: Metering – Instrument Projects

217. Intro to Arduino An Arduino is an open-source microcontroller development board. In plain English, you can use the Arduino to read sensors and control things like motors and lights. This allows you to upload programs to this board which can then interact with things in the real world..... Listed under: Development Board – Kits Projects

218. Carduino- A simple Arduino robotics platform with its own library This is, as the title says, an Arduino-based robotics platform, with its own library. The "standard" model comes with two back motors, two omni-wheels in the front, and a distance sensor mounted on the front. It also has breadboard space on top for adding whatever..... Listed under: Projects, Robotics – Automation Projects

219. Self-Watering Plant using an Arduino Plants liven up any space by adding a sense of airiness and life. That is - of course - when you don't forget to water them, and they shrivel up and die. I am very bad at remembering to water plants. That is why I..... Listed under: Home Automation Projects, Projects

220. Twitter Controlled Pet Feeder using an Arduino A great project for busy pet owners. This Twitter-Controlled pet feeder automatically dispenses food in response to activity on your Twitter account. The project is controlled by an Arduino and uses the Arduino Ethernet shield to receive data from Twitter. I hacked this automatic Pet..... Listed under: Home Automation Projects, Internet – Ethernet – LAN Projects, Projects

221. Reginald: a UDP surveillance bot; control via the Internet using Arduino Reginald started from the simple, yet bold idea to control a bot from anywhere in the

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

222. Audio Output using an Arduino Generate sound or output analog voltages with an Arduino. This Instructable will show you how to set up a really basic digital to analog converter so you can start generating analog waves of all shapes and sizes from a few digital pins on an Arduino..... Listed under: Projects, Sound – Audio Projects

223. DIY Arduino Motor Shield Today, I'm going to show you how to make an Arduino motor shield (driver) at a low cost. It works splendidly, its posses almost all the characteristics of the original Arduino motor shield. It's almost considered as a clone. The original Arduino motor shield has the..... Listed under: How To – DIY – Projects, Motor Projects, Projects

224. Proximity sensing mouse wheel scroller using Arduino List of tools: 1. Exacto 2. Arduino Nano / USB chord (Mini-B) 3. Dremel / Drill 4. Paper & Pencil 5. Sharp IR Sensor (2Y0A21 F) 6. Hot glue gun 7. Solder gun / Solder 8. A small mirror Ok so you might ask, why..... Listed under: Projects, Sensor – Transducer – Detector Projects

225. Big Ball Maze Game using Arduino This project was the result of an urge to contribute something to the Creative Games section of my kids' elementary school fair. The kids loved it for it's simple old-school game aesthetic mixed with Wii-style and Kinect-style video game control. It's a spin-off project of..... Listed under: Arduino Android, Internet – Ethernet – LAN Projects, Projects

226. 10 Useful Arduino Projects to Complete This Year If you are new or experienced in DIY electronics, you probably know about the Arduino. Arduino is an excellent option for microcontrollers; its products are reliable, open-source, affordable, and efficient, with high flexibility. The list shown displays the extensive variety of options available in Arduino..... Listed under: Projects

227. Spinning or Rotating LED Display using Arduino POV Designing a Spinning/Rotating LED Display In this project, we will demonstrate how to create a basic "Rotating LED Display" (commonly referred to as Spinning LED Display) using Arduino. The idea to start this project sparked in my mind after I noticed a product in the..... Listed under: LED Projects

228. How to make a LED 7-segment display with or without Arduino I will demonstrate how to create a 7 segment display using LEDs. Use Arduino in conjunction to make countdown timers, basic text displays, and additional features. I enjoy creating unique projects. I looked through all of instructables and couldn't find anything similar to this. Actually,..... Listed under: LED Projects

229. Internet Radio Using an ESP32 Dear friends welcome to another Instructable! Today we are going to build an Internet Radio device with a big 3.5" display using an inexpensive ESP32 board. Believe it or not, we can now build an Internet Radio in less than 10 minutes and with less than 30$..... Listed under: Radio Projects

230. How to Make a PIP-Boy using an Arduino You may be wondering, what is a PIP-Boy exactly? If you don't know, a PIP-Boy is a tool used by the main character in the well-liked Fallout video game series for navigating, detecting radiation, storing/playing data, and managing inventory. As a huge enthusiast of the..... Listed under: Game – Entertainment Projects, Projects

231. ESP32 Internet Radio The affordable MP3 VS1053 codec processor available on aliexpress.com is said to have the ability to decode different music formats such as Ogg Vorbis/MP3/AAC/WMA/MIDI audio. VS1053 can also record in Ogg Vobis file, but the available guidance online is mainly for proprietary boards or ESP32-IDF,..... Listed under: Radio Projects

232. Efficient Plant Care: Arduino-Based Automatic Watering System Greetings to all, we are glad to have you back on our website! This time around, we are showcasing a superb project: the automated plant watering system. With this project, we use technology to help plants grow on their own. After one month of being..... Listed under: Motor Projects

233. DIY FSK RFID Reader using Arduino This page explains how to build an RFID reader with just an Arduino (Nano 3.0 was used in testing, but other models may be compatible), a wire coil made by hand, and various affordable common components. Credits The hardware and software designs for this project..... Listed under: How To – DIY – Project Ideas, Projects, RFID - NFC projects

234. Custom Large Font For 16×2 LCDs using arduino I started learning Arduino a couple of years ago and started playing around with a 16x2 LCD display that uses

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

235. Game & MINTIA This instructables show how to use a tiny sweet box to make a NES console. https://youtu.be/-ehaDDSYJaE Supplies TTGO T7 v1.3 https://www.aliexpress.com/af/Ttgo-t7-v1.3.html?d=... 1.54" ST7789 IPS LCD https://www.aliexpress.com/af/1.54-st7789.html?d=y... Lipo 303040 https://www.aliexpress.com/af/lipo-303040.html?d=y... MAX98357 I2S DAC audio breakout board https://www.aliexpress.com/af/max98357.html?d=y&or... 10*18 mm speaker https://www.aliexpress.com/af/1018-speaker.html?d=... Thin Prototype PCB https://www.aliexpress.com/af/lipo-303040.html?d=y... Four..... Listed under: Game – Entertainment Projects

236. Build a transistor circuit board for controlling Air Conditioner remote control with Arduino I was supporting a group of student on their graduation project. One of the difficulties they faced was on controlling an A/C unit with Arduino microcontroller. The first experiment we tried to work it out was by record the A/C remote control beam signal for..... Listed under: Home Automation Projects, Projects

237. Compact 3-in-1 Stripboard DIYduino with Integrated Sensor and L298N Motor Shield I am presenting a compact design of a stripboard Arduino board (DIYduino) that includes a 2A motor driver and has additionally the functionality of a sensor shield. The 2-channel version cost approximately $29.43 and is more affordable compared to $39.00 for a commercially available system..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects, Motor Projects, Projects, Sensor – Transducer – Detector Projects

238. Complete Arduino-based 3D-printed Battery-powered Mini Retro Arcade Machine It's been a while since I've published my last Instructables. I'm back, and I'm 3D-printed-powered! Enjoy this mini retro arcade machine. It's literally my first complete end-to-end 3D-printed project: I made the design, printed it, assembled the electronics, programmed it, and now to the tutorial..... Listed under: Battery Projects

239. Controlling an RGB LED With an Android Smartphone Using Arduino and Bluetooth Module The very first project of my channel is about controlling an RGB LED using annoying push buttons.... I feel that the project was not a good one to learn about micro-controllers, because most of the micro-controllers uses are not fully utilised in that project.... So, This is..... Listed under: LED Projects

240. Designing and building an synthesizer with Meeblip and Arduino, added videos! For my internship at Create Digital Music/Meeblip I've created quite a fun little synthesizer. This thing is meant to be more flexible than other synthesizer by making it completely independent; it is battery powered, has its own amplifier/speaker and is controlled by a manually operated sequencer. Inspiration..... Listed under: Sound – Audio Projects

241. DIY Arduino Project ARDUINO SERIAL COMMUNICATION TO PROCESSING, ARDUINO WITH ETHERNET SHIELD, ARDUINO WITH GPRS INTRODUCTION This DIY Arduino project explores various ways to enable communication and connectivity between an Arduino board and external devices or networks. Specifically, it focuses on three components - Arduino serial communication to Processing, Arduino with Ethernet shield, and Arduino with GPRS. The Arduino is..... Listed under: GPS Based Projects

242. Dazzle Your Eyes with a Twinkling LED Symphony: Learn to Create Your Own LED Display This circuit demonstration showcases a random LED flasher controlling twenty lights. LED flashers and sequencers are commonly employed in decorative lighting applications to produce aesthetically pleasing color patterns. Rather than steadfast illumination, these systems cycle LEDs on and off in either a predetermined sequence or..... Listed under: LED Projects

243. DIY Flex sensor using Sugru and graphite powder (Resistencia flexible usando Sugru y polvo de grafito) Este es el primero de 5 instructables que surgieron del Instructables & Sugru build night (and day en nuestro caso) que hicimos en el Laboratorio de Juguete, el 20 de julio del 2013: una Resistencia Flexible o Flex Sensor hecha con Sugru y polvo de grafito:..... Listed under: How To – DIY – Projects, Sensor – Transducer – Detector Projects

244. Drive a webpage in real-time using Arduino, SensorMonkey and Processing.js Remote visualization of real-time sensor data. This tutorial describes in detail how to use the free SensorMonkey service to push real-time sensor data from an Arduino to a webpage for visualization using Processing.js. No server-side coding or Ethernet shield is required. A standard, run of the mill..... Listed under: Internet – Ethernet – LAN Projects, Projects

245. Driving two Nixie tubes with an Arduino via a shift register and two SN74141s Nixie tubes are really cool looking and are becoming quite popular for their 'retro' look. Although there are a number of tutorials out there on using nixie tubes and some nice pre-packaged units (see these nice ones from ogi lumenand ArduiNIX) I hadn't seen a simple tutorial..... Listed under: Development Board – Kits Project Ideas

246. GoFly – paragliding/hangliding/gliding altimeter-variometer from Your car navigation using Arduino GoFly is a project based on PNA (car navigation devices with Windows CE), LK8000 tactical fligh computer software and variometer (altimeter) external input based on Arduino board and pressure sensor. Why? -You can build this for about 150$, -Your ordinary PNA (Personal Navigation Assistant) changes..... Listed under: Car Projects, Metering – Instrument Projects, Projects

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

248. Home Automation (or Robot Butler called Geoffrey) – iPhone controlled, arduino based Being able to control everything from your pocket has long been a dream shared by many. Previously we've had universal remotes that can both control our TVs and radios, then we had wireless wall sockets. Both great things, but how likely is it that you're..... Listed under: Home Automation Projects, Phone Projects, Robotics – Automation Projects

249. How to control arduino board using an android phone and a bluetooth module In this tutorial you'll learn how to use a bluetooth module and MIT's app inventor to create a wireless serial link between an android phone and an arduino board. Here is a short video showing an example app I created. I'll describe how to do..... Listed under: Arduino Android, Internet – Ethernet – LAN Projects, Projects

250. How to Make a Basic Computer Mouse Using the Joystick Module and Arduino Uno This instructable will show you how to make a joystick controlled mouse using Arduino Uno and the joystick module. Supplies You will need- One Arduino Uno 5 jumper wires One Joystick Arduino IDE Python Step 2: Make the Circuit Make this circuit shown using your..... Listed under: Development Board – Kits Projects

251. How to Make a Infrared (IR) Remote Controlled Car With a TV Remote for University Project, Science Fair and Robotics Competition Follow the instructions below to build the remote control car. This project is ideal for science fair, robotics competition and university projects. The design is highly adaptable, you can modify it easily and add your own components. Table of contents Step 1: video demo Step..... Listed under: Other Projects

252. IoT Set-up to Operate/control 220-240 Volt AC Bulb/Device; NodeMCU Amica + 5V Relay + MQTT + Arduino IDE + Web Browser (HTML + JavaScript/jQuery) What are we messing with? IoT (Internet of things) set-up to operate/control 220-240 Volt AC Bulb/Device NodeMCU Amica + 5V Relay + MQTT + Arduino IDE + Web Browser (HTML + JavaScript/jQuery) WARNING!! – THIS PROJECT INVOLVES WORKING WITH HIGH VOLTAGES THAT CAN CAUSE SERIOUS..... Listed under: Other Projects

253. Internet/cloud Controlled Home Automation Using Esp8266 (aREST, MQTT, IoT) Step 1: COMPONENTS REQUIRED Only 4 components required - 1. ESP8266 NODEMCU or WEMOS D1 mini or any esp8266 wifi development board2. RELAY (5V or 6V)3. ULN2003 or UNL2003A (Relay driver IC)4. Jumpers (obviously or else solder it!!) The main structure of the project is..... Listed under: Internet – Ethernet – LAN Projects

254. Arduino Step Sequencer Drum Machine Overview As enthusiasts of audio, we aimed to use our recent understanding of microcontrollers to create an exciting consumer gadget. Our project is a drum machine that functions as a step sequencer. The user can create a 16-step percussion sequence with various percussion instruments on..... Listed under: Sound – Audio Projects

255. Arduino Row-column Scanning to control an 8×8 LED Matrix Code LED displays are commonly packaged as arrays of LEDs organized in rows with shared positive terminals and columns with shared negative terminals, or vice versa. Here is a standard illustration, along with its diagram: These exhibits can be very useful. To control a matrix, you..... Listed under: LED Projects, Projects

256. LIQUID FLOW SENSORS OFFER HIGH-ACCURACY, LOW-MAINTENANCE REPLACEMENT FOR MECHANICAL TURBINE DEVICES Cost-Effective MEMS Sensors Deliver Increased Performance and Reliability, Even in Unstable Pulsatile Flow and Low-Flow Conditions Posifa Technologies introduced its new PLF2000 series of liquid flow sensors. Designed to replace mechanical turbine flow sensors, the cost-effective devices deliver increased accuracy and reliability, even in unstable..... Listed under: Sensor – Transducer – Detector Projects

257. Arduino Knight Rider Code Arduino Knight Rider light effect, a simple variation of blink code. Parts List; 1) 5x 5mm red LED 2) 1x Arduino 3) 5x 330Ω resistor 4) Jumper wire Instruction; 1) Connect all LED as diagram below, make sure cathode lead of LED at ground..... Listed under: LED Projects, Projects

258. Make your own Custom Electronic Widgets, like my Arduino LED Day/Night Widget This is just a brief run down on how easy it has become to make your own circuits complete with your own PCB's. Have you ever wanted to make something custom that suits your needs? Of course you have!! For me it really started when..... Listed under: LED Projects

259. Making the Maker Hub: Printing a 3d printer, Arduino and construction pics RepRap Update [caption id="attachment_86378" align="aligncenter" width="600"] 3D printed parts for a new 3D printer![/caption] I have finally printed all the plastic parts for the Griffin Open Source 3D printer I'm building, and they look fantastic! The remaining components should arrive soon, and then I can..... Listed under: Other Project Ideas

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

unavailable, an Arduino board can help burn bootloaders onto AVRs. It also enables creating..... Listed under: Arduino Programmer Projects

261. Matrix sound machine: Generative music with a particle system using Arduino This project is a part of experiments done while doing an artist in residence at Instructables. You can see the other projects here. Creating emergent patterns that can be converted into sounds fascinates me. So this is my first experiment in building an arduino platform for..... Listed under: Projects, Sound – Audio Projects

262. Arduino Cyclone Reaction Time Game In this instructable, we walk through how I made a "Cyclone" - type arcade game using an Arduino. This game also includes a reaction timer mode. Let's get started! A list of things you will need: Arduino Uno LCD Screen MCP23017 serial port expander 2..... Listed under: Game – Entertainment Projects

263. Arduino Based Real-Time Oscilloscope Arduino Based Real-Time Oscilloscope The Oscilloscope is an essential instrument for the workbench of every electronics engineer or maker. It is primarily used for monitoring waveforms and analyzing voltage levels, frequency, noise, and other signal characteristics that can change over time at its input. Embedded..... Listed under: Development Board – Kits Projects

264. Mr. Indecision – a small felt version of yourself that turns its head and looks at you using Arduino This is a tutorial on how to use 123D Catch to get a 3D scan of your whole body. Once you have the scan or "catch" the tutorial will take you through a technique to clean it up and manipulate it ready for 123D Make..... Listed under: Game – Entertainment Projects, Projects, Sensor – Transducer – Detector Projects

265. Automating A Home Snowmaker Using An Avr Microcontroller Before describing how the automated system functions, it is important to describe the science of snowmaking in general and to define a few key terminology that will appear often in the remaining sections of the text. Although the science of snowmaking is complex, for the..... Listed under: Home Automation Projects

266. Autonomous Control of RPM of Engine Using Feedback System From a IR Based Tachometer There is always a need for automating a process,be it a simple/monstrous one.I got the idea to do this project from a simple challenge that i faced while finding methods to water/irrigate our small piece of land.The problem of no current supply lines and costly..... Listed under: Other Projects

267. Armadino – an Arduino Gameboy, Clock, Electronic Lab, TVout Console and More... Some years ago, I came across Mignon and Meggy Jr RGB, and was intrigued enough to want to make something similar, but with a wider screen, more possibilities for experiment and play, and with few parts. I called it Armadino, after seeing an armadillo logo on the spine of..... Listed under: Game – Entertainment Projects

268. Arduino Based 3-Way Traffic Light Controller We all know about Arduino. It is one of the most popular open source micro controller board which is highly useful for doing DIY projects. This Arduino based 3-Way Traffic Light Controller is a simple Arduino DIY project which is useful to understand the working of..... Listed under: Arduino LED Project Ideas

269. Arduino Automatic Watering System INTRODUCTION & OBJECTIVES: I am a basic system that utilizes Arduino for automating the watering of small potted plants or crops. This system monitors soil moisture levels by using LEDs for indications and emitting an alarm beep if the soil is dry. If the soil..... Listed under: Home Automation Projects, Projects

270. Reading pulses from meters with pulse outputs.. using arduino A note on what this document covers The key addition to the wealth of online information about pulse counting is the method of counting pulses from multiple sources (up to 12) using continuous sampling and direct port manipulation in an Arduino sketch instead of interrupt-based..... Listed under: Temperature Measurement Project Ideas

271. Quiz Game Show Buzzer using Arduino My close friend, who works as a teacher, was conducting quizzes in her class that involved students competing to answer questions. This caused some students to complain about not getting a chance to answer even though they had raised their hands first. I chose to..... Listed under: Game – Entertainment Projects

272. LCD & Keypad Shield Quickstart Guide using arduino The 16x2 LCD And Keypad Shield is easy to use as it works seamlessly with the Arduino "LiquidCrystal" library. With just a few lines of code, you can set up the LCD and show messages on it. Additionally, you have the option to create more..... Listed under: LCD Projects

273. Arduino Based Vehicle Accident Alert System using GPS, GSM and Accelerometer In our previous tutorials, we have learned about How to interface GPS module

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

274. Drawing an Arduino Circuit Diagram I've been in possession of an Arduino Duemilanove for a couple of weeks. If you are unfamiliar with the Arduino, it is defined as "a platform for creating electronics prototypes using adaptable, user-friendly hardware and software". The setup consists of a small microcontroller, a USB..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects

275. DIY wattmeter with an Arduino DIY wattmeter with an Arduino Measuring power and energy using regular multimeters can be challenging or even unfeasible at times. In order to conduct such a precise and reliable measurement, a specific wattmeter is necessary. Due to their high cost, an alternative option is introduced..... Listed under: How To – DIY – Projects, Metering – Instrument Projects

276. Custom OBD II Gauge in With OEM Look using arduino https://github.com/stirobot/arduinoModularTFTgaugesI built a custom OBD II (on board diagnostics version 2 http://en.wikipedia.org/wiki/On-board_diagnostics) The clock in my Subaru BRZ (GT86, FRS) was a popular feature, and many people asked me to make one for them. This is how you can construct your own. My spouse is..... Listed under: Arduino Car Project Ideas

277. CT sensors – Interfacing with an Arduino To connect a CT sensor to an Arduino, you need to adjust the CT sensor's output signal to match the Arduino's analog input requirements: a positive voltage ranging from 0V to the ADC reference voltage. Note: This page shows an example of an Arduino board..... Listed under: Sensor – Transducer – Detector Project Ideas

278. Musical Exercise: Workout Shirt MP3 Player Powered by Exercise using Arduino People love listening to music while exercising. Music provides the motivation needed for individuals to keep exerting energy and get in shape. So, because people enjoy listening to music while exercising, what if an MP3 player only played an individual's music while they are active?..... Listed under: Game – Entertainment Projects, Sound – Audio Projects

279. Arduino Wattmeter: Measure Voltage, Current and Power Consumption Being electronics engineers, we consistently rely on meters and instruments to gauge and study the functionality of a circuit. From basic multimeters to advanced power quality analyzers or DSOs, each device serves specific purposes. Many of these gauges are easily accessible and can be bought..... Listed under: Metering – Instrument Projects

280. Arduino Stepper Motor Control Hardware Preparation Stepper Motor Driver Board Arduino Board (UNO) If you bought the Arduino Board from ZTW, we have already installed the g-code library for you. If you have your own Arduino Board, you have the option to download the grbl Arduino library from the..... Listed under: Motor Projects

281. Arduino + MLX90614 IR Thermometer Having the ability to feel temperature is exciting... However, being able to detect the temperature of an object without any physical contact is truly amazing. The MLX90614 is a sensor with the capability of achieving that. This person can detect temperatures ranging from -95 to..... Listed under: Temperature Measurement Projects

282. Arduino Based Fire Fighting Robot The NCRB stated that more than 120,000 fatalities in India were linked to fire mishaps from 2010 to 2014. Despite the many safety measures implemented for fires, they still happen from time to time. In the event of a fire, we must use personnel who..... Listed under: Robotics – Automation Projects

283. 26-Way MIDI DRUMS His creation is a 26-key drum pad setup that combines MIDI and USB connectivity, featuring a fixed velocity byte for 10 drum switches alongside a 16-key velocity-sensitive circuit. This system utilizes piezo sensors to achieve a complete velocity range from 0 to 127. The drums..... Listed under: Other Projects

284. WATER LEVEL MEASUREMENT USING ARDUINO UNO R3 AND WATER SENSORS Greetings, welcome back. Today, we will demonstrate the process of creating a water level detector utilizing an Arduino Uno and water sensors. There are numerous water level sensor tutorials available online, but this method stands out. To begin with, let's talk about the components required..... Listed under: Metering – Instrument Project Ideas

285. RGB Color Detector Using TCS3200 Sensor Module This Color Detector utilizes an Arduino Uno R3 and TCS3200 color sensor module. Color identification and detection can be beneficial for food-processing units, color printer applications, paint-mixing applications, and other industrial applications such as robotics. This project is designed to identify basic colors (red, green,..... Listed under: Sensor – Transducer – Detector Project Ideas

286. RFID cat door using Arduino Intro: RFID Cat Door Only the pet with the correct RFID tag can unlock this specific cat door/flap. Arduino is responsible for

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

287. ESP32/ESP8266: Seamless Data Integration with MySQL and PHP This project involves creating a device with either an ESP32 or ESP8266 that can connect with a server from a distance. The gadget will function as an HTTP client by sending POST requests to a PHP script. The aim of these requests is to transmit..... Listed under: Other Projects

288. Automatic Irrigation System (Arduino) With Usb Type DC Submersible Water Pump This mini project is involved to use Arduino to control submersible watre pump when soil reach below or above predefined moisture level. How it works ❓ 1. Soil moisture sensor is reading analog signal which transmit to Arduino. 2. Arduino control submersible water pump ON..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects

289. Arduino Spectrum: Building a DIY Spectrophotometer The environment shows a range of light colors, each moving at its own wavelength like a symphony. The Spectrophotometer Project based on Arduino aids in revealing the hidden language of light. This project provides a captivating investigation of the field of spectroscopy. It allows the..... Listed under: Motor Projects

290. Arduino Projects: Audio VU Meter Displayed is an audio meter based on Arduino that utilizes a liquid crystal display (LCD). A VU meter, also known as a standard volume indicator (SVI), is a tool that shows the signal level in audio equipment. This project involves displaying the intensity of left..... Listed under: Metering – Instrument Projects

291. Interfacing Flame Sensor with Arduino to Build a Fire Alarm System This tutorial discusses how to connect a Flame Sensor to an Arduino and create a Fire Alarm System using the same components. The flame sensor module utilizes a photodiode for light detection and an op-amp to regulate sensitivity. It is utilized for fire detection and..... Listed under: Sensor – Transducer – Detector Projects

292. Wireless Weather Monitoring: Arduino NRF-Based System Hello tech fans! We're thrilled to present our newest project created to help in a range of environments such as households, workplaces, and beyond. Introducing our weather monitoring system that utilizes Arduino as the main controller to carry out commands. This system accurately monitors ambient..... Listed under: Wireless Projects

293. Top 10 Best Simulators for Arduino In this article, I will discuss the best 10 Arduino simulators that are currently on the market. The most popular software for simulating circuits and embedded systems with the Arduino microcontroller development board. In previous writings, I discussed the simulation of Arduino-based circuits using Proteus..... Listed under: Development Board – Kits Projects

294. Simple Arduino Audio Player and Amplifier with LM386 Incorporating sounds or music into our project will reliably increase its attractiveness and make it more visually appealing. If your Arduino has many pins to spare, you can easily incorporate sound effects into your project by using an extra SD card module and a standard..... Listed under: Sound – Audio Projects

295. RFID Blocking – How Secure Are Our RFID Cards? How Can We Protect Them Further? – an Experiment NOTE: Vocab RFID Reader - The box-like object that can be activated by an RFID tag RFID Tag/RFID Card - The card or tag that activates the reader. I took apart one and is displayed in the pictures above. RFID System - The tag and..... Listed under: Arduino RFID Project Ideas

296. Password Based Door Lock System Using Arduino SIMULINO UNO Security presents the primary challenge in today's modern society. Anyone has the ability to enter your personal residence at any moment in order to steal your belongings. In order to keep your home safe from burglars, you must ensure it is secure. A motor is..... Listed under: Security – Safety Project Ideas

297. Smart Electricity Meter with Energy Monitoring and Feedback System for Theft Detection The project is basically to detect the theft from the energy meter used in households as well as in... Description The project is basically to detect the theft from the energy meter used in households as well as in the commercial sector. There is two..... Listed under: Metering – Instrument Projects

298. Spotted Gecko Habitat Temperature Monitor/Thermostat W/Arduino & ESP8266 ESP12 Soooo....Wifey decided that it was time for a new pet. Spin the wheel....A Spotted Gecko!! Well, Geckos are apparently very temperature sensitive creatures so we invested in a UTH (Under Tank Heatpad) for those of us that are new to the world of reptiles. The purpose..... Listed under: Temperature Measurement Projects

299. How to Use the RPLIDAR 360° Laser Scanner With Arduino I enjoy creating sumo robots and am constantly searching for innovative sensors and materials to

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

300. Synchronized 2-Axis Motion With Variable Speed (Arduino + LEDs + 28BYJ-48) https://youtu.be/liEz_sJd45E This tutorial shows how to move two stepper motors so they will synchronously arrive at defined destination point. There are many sophisticated solutions for doing this such as GRBL or Marlin. Using an Arduino, there are also dedicated “Multi Stepper” libraries that can support you. However, we will use…... Listed under: LED Projects

301. Telecommunication and Computer Networks: Speed Regulation of DC Motor Using DTMF Keypad Introduction In the realm of telecommunication and computer networks, the application of Dual Tone Multi-Frequency (DTMF) technology has extended beyond traditional telephony into diverse fields, including industrial automation and control systems. One intriguing application of DTMF technology is in the speed regulation of DC motors……. Listed under: Motor Projects

302. How To Build Arduino Thermal Camera I recently worked on an Arduino project to create a low-cost thermal camera using an IR sensor and pan/tilt hardware. When observing the device image on the left, you will notice an acoustic range finder attached to the top as well. The tool functions by…... Listed under: Projects, Video – Camera – Imaging Projects

303. Teensy MIDI USB foot controller for controlling Mobius Looper using Arduino Motivation: Playing in a 2 piece band, with the drums and lots of other samples being played back as backing tracks, there was a need to use a looper to add in more elements to the tracks. A hardware based looper fails in this respect,…... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects

304. Arduino-based Ultrasonic Radar System via IOT Abstract RADAR is a system that detects objects by using radio waves to measure the distance, height, position, or velocity of objects. Radar systems are available in a range of sizes and come with various performance specifications. Certain radar systems are employed for managing air…... Listed under: Medical – Health based Projects

305. Controlling a clock with an Arduino Update: The Arduino system is fine; the only thing you have to take into consideration is the 9.54 hour rollover event, which Rob Faludi has provided an excellent solution for here. I made up a nice little over-analysis of the issue, available here. For a…... Listed under: Clock – Timer Projects, Projects

306. TinyML: Slope Control for Robots With Arduino Pro. Building an Inclination Estimator System With Nicla Sense ME and Neuton The vacuum cleaner robot is one of the most useful inventions of the last decade and anyone who says differently means that he does not have one! This fantastic household appliance is a concentration of technology: a complex embedded system composed of some microcontrollers, many…... Listed under: Robotics – Automation Projects

307. Arduino-Powered Smart Water Heater: A DIY Project Greetings to all, we welcome you back to Techatronic. During today's meeting, we will discuss the development of a smart water heater project that involves Arduino and DS1820B temperature sensors. If you're interested in creating a mobile smart water heater for the winter, then this…... Listed under: Temperature Measurement Projects

308. Arduino Magic: Driving Stepper Motors using ULN2003 Driver Introduction Hello everyone, I hope all of you are doing well. This article gives guidance on constructing a circuit to control a stepper motor using an Arduino UNO and the ULN2003 motor driver. Listed below are three circuit diagrams along with their corresponding codes. You…... Listed under: Motor Projects

309. Transform Your Home into a Futuristic Hub with This DIY Real-Time Clock and Temperature Display This project demonstrates building a real-time clock (RTC) with temperature display using an Arduino, DS3231 RTC chip, and SSD1306 OLED display (128x64 pixels). The DS3231 RTC chip provides more accuracy than the DS1307 and incorporates an onboard temperature sensor. It maintains timekeeping even without the…... Listed under: Clock – Timer Projects

310. Ultimate Mosquito Swatter Mod for Gamer: Add Kill Counter, Sound, Rechargeable Battery. Where I live, from spring to autumn we have to compete for territory against tiger mosquito. Local stores offer a impressive list of anti mosquito devices, candles, including sophisticated traps sold a few hundred euros, I even found one sold 2000€ - this give you…... Listed under: Game – Entertainment Projects

311. Using Temperature, Rainwater, and Vibration Sensors on an Arduino to Protect Railways In modern-day society, an increase in rail passengers means that rail companies must do more to optimize networks to keep up with the demand. In this project we will show on a small scale how temperature, rainwater, and vibration sensors on an arduino board can…... Listed under: Temperature Measurement Projects

312. Arduino ATtiny2313 Programming Shield Today, I constructed a compact 3x3x3 LED cube utilizing an ATtiny2313 that I acquired around 2 weeks ago. Every time

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

313. High-Power Control: Arduino + N-Channel MOSFET Eventually you are going to find yourself holding a 12v solenoid, motor, or light and wondering “How the heck am I supposed to control this from my Arduino?” And we have covered this in the past. Today we are going to talk about another way…... Listed under: Other Projects

314. Creating a DIY device for monitoring power consumption using ESP32 Electrical appliances, such as smartphones chargers and room heaters, play a crucial role in our everyday routines. This includes larger devices like air conditioners and washing machines. With the ongoing worldwide energy crisis, it is essential to understand the electricity usage of these devices. Although…... Listed under: Other Projects

315. Wireless Communication of Multiple Variables Between 2 Arduinos Using HC-12 In this tutorial, I will show you how to achieve wireless communication of variables between 2 Arduinos using the HC-12 module, that operates from 433,4-473 Mhz. HC-12s are wireless modules for arduino to arduino communication, because they can send multiple variables over long distances-ones up…... Listed under: Wireless Projects

316. Aergia: Android controlled TV Remote(with Speech Recognition) using Arduino Have you ever faced this situation while sitting on your favorite spot on the couch or recliner, comfortably watching your favorite TV program? You're snugly tucked under the blanket, the air conditioning is pleasantly cool, the sun outside is shining it's delicate warm golden rays…... Listed under: Arduino Android

317. Getting Started With the ESP8266 ESP-01 The ESP8266 ESP-01 is a module for Wi-Fi that enables microcontrollers to connect to a Wi-Fi network. This module is an independent SOC (System On a Chip) that does not require a microcontroller for managing inputs and outputs like you would typically do with an…... Listed under: Wifi - WLan Projects

318. Sound Localization using Arduino In theory, it is quite simple to perform sound localization by measuring the phase difference of signals received by two microphones that are far apart in space. The devil is always in the details. I have not come across any project made for Arduino like…... Listed under: Projects, Sound – Audio Projects

319. Arduino Starter Kit Multi-language Introduction The Arduino platform has lowered the entry barrier for physical computing and IoT development. However, learning to code is also key. The Arduino Starter Kit Multi-language addresses this with an all-in-one solution for exploring Arduino through multiple programming languages. Included Hardware The kit includes…... Listed under: Other Projects

320. SITWAY You are never to old to learn and try new things. I think one of the best days in my life was the day I discovered the Instructables web site. It opened up a whole new world to me. This is my third instructable ……. Listed under: Robotics – Automation Projects

321. Arduino Weight Measurement using Load Cell and HX711 Module Today, we will be measuring weight by connecting a Load Cell and HX711 Weight Sensor with Arduino. Weight machines can be found in various stores, and they show the weight when an item is placed on the weighing platform. Thus, we are constructing a weighing…... Listed under: Metering – Instrument Projects

322. VivoGame VivoGame (something like "liveGame" in english) is a funny 2 players game whose goal is hit a target with a automated dart. One player wear a "glasses" that doesn't let him see the target. 3 leds that replace each lens, allow the other one, who…... Listed under: Game – Entertainment Projects

323. Sweep Sweeps the shaft of a RC servo motor back and forth across 180 degrees. This example makes use of the Arduino servo library. Hardware Required Arduino Board (1) Servo Motor hook-up wire Circuit Servo motors have three wires: power, ground, and signal. The power wire…... Listed under: How To – DIY – Projects, Motor Projects

324. Old Sole Old Sole interrupts normal youthful days to force young people to interact with their environment in a different way. If the young shoe-wearer takes significantly more steps than the elderly individual with the walker, the shoes light up and vibrate uncomfortably, reminding the young person…... Listed under: Other Projects

325. Flip Flip Intro There is something kind of magical about swimming when you are a child. Do you remember growing up and watching your shadow as you swam

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

326. DeCart Description DeCart is an attachment to a shopping cart that uses social pressure to make the shopping a more productive, connected experience for society as a whole. List of Materials Although the entire premise of the project is simple, the implementation, however, is not and..... Listed under: Other Projects

327. BOXZ BOXZ is is an open source robot platform for interactive entertainment! We connected Arduino, Plexiglass(or cardboard) Origami and your idea together, so we can easily and quickly build a remote robot by ourself! You can assembled it like LEGO! We can use it to playing..... Listed under: Game – Entertainment Projects, Robotics – Automation Projects

328. How to Build a Vibration Motor Circuit This project will demonstrate the process of creating a circuit for a vibration motor. A vibration motor is a motor that will vibrate once it receives enough power. It is a motor that truly vibrates. It is highly effective for making objects vibrate. It has..... Listed under: How To – DIY – Projects, Motor Projects

329. A Guide to Building Your Own Single-Axis Solar Tracking System Introductions of single axis solar tracker: A commonly favored Arduino project is a solar tracker system that follows the intensity of sunlight. It is divided into two primary categories: the single-axis solar tracker and the dual-axis solar tracker. The solar tracker with only one axis..... Listed under: Solar energy projects

330. Yet Another Daft Punk Coffee Table (5×5 LED Matrix) using arduino Yes, I know this has been done before, but I wanted to build my own, using as few parts as possible. I built this as a table top or wall mount model, but it can be scaled up to make a coffee table. I built..... Listed under: LED Projects

331. Wireless nunchuk controlled animatronic doll This instructable will attempt to show you how to make an animatronic doll controlled by a wireless nunchuk. This doll can only move its head though. I'm sure there are plenty of people out there who can take this and expand on it and make..... Listed under: Game – Entertainment Projects

332. Wireless nunchuk controlled animatronic doll using Arduino This instructable will attempt to show you how to make an animatronic doll controlled by a wireless nunchuk. This doll can only move its head though. I'm sure there are plenty of people out there who can take this and expand on it and make..... Listed under: Game – Entertainment Projects, Internet – Ethernet – LAN Projects, Projects

333. Wireless Doorbell Receiver This project describes the second part of the following two projects: A wireless doorbell transmitter as described in the Wireless Doorbell Transmitter Instructable. This Instructable also gives some introduction to these projects. A wireless doorbell receiver described in this Instructable. The wireless doorbell receiver will make a..... Listed under: Wireless Projects

334. Turn your Arduino into a 4 voice wavetable synth Multiple synthesizer projects have been done for the Arduino, but few have been able to utilize the full power of the Arduino processor. DZL from GeekPhysical wrote a 4 voice wavetable synthesizer that is one of the more advanced software based synths for the Arduino..... Listed under: Sound – Audio Projects

335. The CoaTracker using Arduino Has this ever happened to you? You wake up in the morning and realize that you're terribly late for work/class/your weekly pedicure/whatever. You throw on a t-shirt and flip flops, sprint around your warm, heated house grabbing your belongings, and race out the door...where you..... Listed under: Ideas, Sensor – Transducer – Detector Project Ideas

336. Switch Statement used with serial input using Arduino An if statement allows you to choose between two discrete options, TRUE or FALSE. When there are more than two options, you can use multiple if statements, or you can use the switch statement. Switch allows you to choose between several discrete options. This tutorial shows you..... Listed under: How To – DIY – Projects, Projects

337. Step-by-step guide for making a very simple temperature and humidity meter with 7-segment LED displays In this blog post, I am providing you step by step instructions to build a very simple temperature and relative humidity meter for indoor use. All you need to build this project are an Arduino Uno or compatible board, a DHT11 sensor, and a MAX7219..... Listed under: LED Projects

338. Standalone Arduino chip on breadboard If you're like me, after I got my Arduino and performed a final programming on my first chip, I wanted to pull it off my

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

339. SmartMesh – Arduino and Android Controlled Pneumatic Facade This project was part of Multimodal Media Madness 2014, hosted by the chair for Computer Aided Architectural Design (CAAD) and the Media Computing Group of RWTH Aachen University. For more Smart Skins, please check this page: http://hci.rwth-aachen.de/m3_ss14 During this project, the students were asked to..... Listed under: Arduino Android

340. Self-Contained 7x7x7 LED Cube LED cubes are true 3D displays that work by lighting up points in a 3D lattice of LEDs. On the 3D display you can produce some truly mesmerizing animations. This Instructable will walk you through creating an LED cube for yourself that is completely self-contained and powered..... Listed under: LED Projects

341. Self-Contained 7x7x7 LED Cube using Arduino LED cubes are true 3D displays that work by lighting up points in a 3D lattice of LEDs. On the 3D display you can produce some truly mesmerizing animations. This Instructable will walk you through creating an LED cube for yourself that is completely self-contained and powered..... Listed under: LED Projects, Projects

342. Program your Arduino with an Android device Hi, in this Instructable I want to show you, how you can program your Arduino with your Android device. It is very simple and cheap. Also it allows us to program our Arduino where ever we want, this is usefull for permanently installed Arduino boards,..... Listed under: Arduino Android, Electronics News Updates

343. Palm Arduino Board V3 I design and create this Palm Arduino V3 prototype PCB, as I was tired of recreating Arduino Compatible on perf board every time I prototyping a new project, especially when I had to spend a lot of time tracing the wiring to see that I..... Listed under: Development Board – Kits Projects, Projects

344. Monitor – Thinking Skins using Arduino This project was part of Multimodal Media Madness 2014, hosted by the chair for Computer Aided Architectural Design (CAAD) and the Media Computing Group of RWTH Aachen University. For more Thinking Skins, please check this page: http://hci.rwth-aachen.de/m3_ss14 Given were small shared space containers for 6/8..... Listed under: LED Projects

345. Mini BillBoard Designing a Mini BillBoard using LED Lights(different colors) , Arduino and Bread Board. Thought of creating a mini billboard, that could display my name ("Josh") . This is for one of the build nights (required us to use LED lights). This billboard would blink in..... Listed under: LED Projects

346. Mini BillBoard using Arduino Designing a Mini BillBoard using LED Lights(different colors) , Arduino and Bread Board. Thought of creating a mini billboard, that could display my name ("Josh") . This is for one of the build nights (required us to use LED lights). This billboard would blink in..... Listed under: Game – Entertainment Projects, LED Projects

347. Making Music with Makeblock Makeblock is an aluminum extrusion based construction system that provides an integrated solution for aspects of mechanics, electronics and software design. With Makeblock you can make professional robots, toy machines or even art-ware. It's super easy-to-use and helps bring your creations to life. The only..... Listed under: Sound – Audio Projects

348. How to Make a Makeblock Music Robot with the Music Robot Kit (NEW) Makeblock is an aluminum extrusion based construction system that provides an integrated solution for aspects of mechanics, electronics and software design. With Makeblock you can make professional robots, toy machines or even art-ware. It's super easy-to-use and helps bring your creations to life. The only..... Listed under: Robotics – Automation Projects, Sound – Audio Projects

349. Make A G Meter using Arduino I have a late 80's VW and the gauge cluster has 5 dummy LED locations underneath the other warning lights. Well I was tired of the m not doing anything, so I decided to do something about it. I came up with the idea to..... Listed under: Metering – Instrument Projects

350. Internet Devices for Home Automation This instructable shows the principles involved in making devices to control home automation over the internet. We're going to construct a device (or several of them), that talk to each other over the internet to control lights, motors for curtains/blinds, power sockets etc. In contrast..... Listed under: Home Automation Projects, Interfacing(USB – RS232 – I2c -ISP) Projects

351. Internet Devices for Home Automation using Arduino This instructable shows the principles involved in making devices to control home automation over the

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

352. iAndroidRemote – Control Android mobile using an Apple Remote I love to integrate devices which are not supposed to be integrated and this guide shows you how you can control an Android mobile using Apple's Remote. (Who said Apple devices work only with Apple products 😉) Also this is my entry to the..... Listed under: Internet – Ethernet – LAN Projects

353. Hookup an LCD to an Arduino Adding an LCD display to Arduino projects can add real value but the cost of doing so can be significant. Not a financial cost - you can pick up 16 (characters) x 2 (rows) LCD for as little as £3.50. The cost is the pin..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects, LCD Projects, Projects

354. Hookup an LCD to an Arduino in 6 seconds with 3, not 6 pins Adding an LCD display to Arduino projects can add real value but the cost of doing so can be significant. Not a financial cost - you can pick up 16 (characters) x 2 (rows) LCD for as little as £3.50. The cost is the pin..... Listed under: LCD Projects, Projects

355. Homemade Dual H-Bridge – L298 Breakout Board using Arduino This is my homemade Dual H-Bridge using the IC L298N. For control DC motors or step Motors ao other purposes just like you need. Breakout L298N.ppt1 MB Step 1: Hardware and Materials COMPONENTS: 1 x perf board 13x26 holes (3,5 x 7,0 cm) 2 x..... Listed under: Arduino Android, Internet – Ethernet – LAN Projects, Projects

356. Daft Punk Coffee Table 5×5 LED Matrix using an Arduino Yes, I know this has been done before, but I wanted to build my own, using as few parts as possible. I built this as a table top or wall mount model, but it can be scaled up to make a coffee table. I built..... Listed under: Home Automation Projects, LED Projects, Projects

357. Control Android mobile by an Apple Remote using Arduino I love to integrate devices which are not supposed to be integrated and this guide shows you how you can control an Android mobile using Apple's Remote. (Who said Apple devices work only with Apple products 😉) Also this is my entry to the..... Listed under: Arduino Android, Internet – Ethernet – LAN Projects, Projects

358. A compact, Arduino altimeter for RC Planes Please vote for this Instructable if you think it deserves it! Thanks! The Ultimate Altimeter is a super-compact, Arduino controlled altimeter capable of measuring the altitude with an accuracy of 0.3 meters, and saving the highest and lowest values it has measured. It is powered..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects

359. CoaTracker Using Arduino Has this ever happened to you? You wake up in the morning and realize that you're terribly late for work/class/your weekly pedicure/whatever. You throw on a t-shirt and flip flops, sprint around your warm, heated house grabbing your belongings, and race out the door...where you..... Listed under: Sensor – Transducer – Detector Projects

360. Cell phone text using an Arduino Arduino text'in. Key Features: 24 relays controlled by 4 I/O lines! Cell phone text using your Arduino. This project hacks a cell phone to text using normally open relays. After investigating cellular modules on the internet I decided it looks not only rather pricy, but..... Listed under: Phone Projects, Projects

361. ARDUINO RF power & SWR meter This drawing will display RF power and SWR readings from any SWR bridge, such as the 'monimatch' type. Since this type of bridge, called 'monimatch,' varies with frequency, the meter needs to be adjusted for each bandwidth. My main focus was on VHF/UHF/SHF, so I..... Listed under: Metering – Instrument Projects

362. Arduino text'in Arduino text'in. Key Features: 24 relays controlled by 4 I/O lines! Cell phone text using your Arduino. This project hacks a cell phone to text using normally open relays. After investigating cellular modules on the internet I decided it looks not only rather pricy, but..... Listed under: Phone Projects

363. Arduino Sound Alarm I've just completed my second Arduino project, a sound level detector which sets off an "alarm" when there's the sound level is to high for too long. I built it for use in a school that wants to provide visual feedback to students when they..... Listed under: Projects, Security – Safety Projects, Sound – Audio Projects

364. Arduino Sketch RemoteStation This sketch demonstrates Internet-based remote communication using a companion 'bridge' program running on the attached

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

365. Arduino Sketch Remote User Interface This sketch demonstrates Internet-based remote communication using a companion 'bridge' program running on the attached host which sends and receives messages via an online MQTT server. This allows connecting one Arduino to another over arbitrary distances, which we can use as a starting point for..... Listed under: LED Projects

366. Arduino Lens Controller – Synchronized Zoom/Focus with Wii Classic Controller My Lumix GH2 Micro Four Thirds camera not only shoots fantastic high definition videos, but with inexpensive adapters I can use it with older manual lenses that are cheap and often very high quality. I shoot a lot of performance videos for my daughter's dance studio, and I..... Listed under: Video – Camera – Imaging Projects

367. Arduino camera Lens Controller My Lumix GH2 Micro Four Thirds camera not only shoots fantastic high definition videos, but with inexpensive adapters I can use it with older manual lenses that are cheap and often very high quality. I shoot a lot of performance videos for my daughter's dance studio, and I..... Listed under: Projects, Video – Camera – Imaging Projects

368. Arduino Board Sound Alarm I've just completed my second Arduino project, a sound level detector which sets off an "alarm" when there's the sound level is to high for too long. I built it for use in a school that wants to provide visual feedback to students when they..... Listed under: Projects, Security – Safety Projects

369. Android talks to Arduino This project slightly modifies the Google Android sample app called "Bluetooth Chat" so you can type a message in the Android app and that same message will appear on an LCD attached to an Arduino Uno. Functionality: Android talks to Arduino 1. Run the Android..... Listed under: Arduino Android, Interfacing(USB – RS232 – I2c -ISP) Projects, Internet – Ethernet – LAN Projects, Phone Projects, Projects

370. Android talks to Arduino board This project slightly modifies the Google Android sample app called "Bluetooth Chat" so you can type a message in the Android app and that same message will appear on an LCD attached to an Arduino Uno. Functionality: Android talks to Arduino 1. Run the Android..... Listed under: Arduino Android, Internet – Ethernet – LAN Projects, Projects

371. Physical Computing and DC Motor Control Managing a DC motor through an Arduino is a straightforward task. Beyond employing a basic electric switch, there are diverse approaches to engage with a motor. Moreover, the conventional electromechanical relay can be readily substituted with a carefully chosen transistor, enabling software-based speed control. This..... Listed under: Arduino Motor Project Ideas

372. Creating Mini Digital Roulette Games with Arduino. Crafting straightforward electronic games becomes effortless with the Arduino. Within the scope of this chapter, I will demonstrate the possibility of constructing an interactive mini casino game using fundamental digital electronic circuits within a mere two-hour timeframe. By leveraging just nine distinct electronic elements and..... Listed under: Game – Entertainment Project Ideas

373. The NetP Project: Creating a Network of Processors with Arduino Mini Pro Boards Narrative Arduino is truly remarkable; I have a deep fondness for it. It can be likened to the "Lego" of the electronics and automation world. Presently, I'm engrossed in a project where numerous MCU boards are orchestrated to form an interconnected network of processors, aptly..... Listed under: Blog, Development Board – Kits Projects

374. BO Motor With Encoder Gives Precise Movement For precise BO motor control or for crafting budget-friendly projects utilizing PID, the integration of such encoders with motors holds great promise. Story Geared DC motors find extensive application in hobby projects, such as constructing robotic cars and moving robotics. Yet, for meticulous movement, the..... Listed under: Arduino Motor Project Ideas

375. Ez Arduino 12 DOF Quadruped Robot – Robot Dog Lassie Since Boston Dynamics presented their quadruped robot named Spot, everybody wants their own robot dog. There have been several efforts to create a robot with the same features. Many are costly and quite challenging to understand and create. This guide aims to provide a do-it-yourself..... Listed under: Robotics – Automation Projects

376. Dual Axis Solar Tracker Arduino Project Using LDR & Servo Motors Salutations and thank you for visiting The IoT Projects. This guide is intended to show the ways of building the Dual Axis Solar Tracker Arduino Project using LDRs and Servo Motors. The publication can be divided into seven parts, which can determine an extensive guide..... Listed under: Motor Projects

377. Sinewave Inverter Circuit Using Arduino The article demonstrates the construction of a basic sinewave inverter circuit utilizing PWM signal from an Arduino Uno,

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

378. Measuring PPM from MQ Gas Sensors using Arduino (MQ-137 Ammonia) Since the industrial age, we humans have been progressing quickly. As we make advancements, we simultaneously harm our environment, leading to its eventual degradation. Currently, the issue of global warming is a concerning danger and even the quality of the air we breathe is becoming..... Listed under: Other Projects

379. Interfacing LabVIEW With Arduino Interfacing LabVIEW With Arduino In previous article of Getting Started with LabVIEW, we have seen about LabVIEW and how it can be graphically programmed and executed in computer (software level). Now in this article we learn about How to Interface LabVIEW with Arduino Board. Requirements To interface..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects

380. Arduino-Powered Fire Fighter Robot: A Step-by-Step Guide Greetings to all, we are glad to have you back at Techatronic. You may have heard of a fire-fighting vehicle before. Today, we are unveiling a groundbreaking breakthrough - the Firefighter Robot. This machine is specifically created to function independently, thereby fitting the definition of..... Listed under: Robotics – Automation Projects

381. Arduino Nano Tutorial – Pinout & Schematics Arduino Nano Pinout The Arduino Nano is indeed small in size but is packed with all the features of a regular microcontroller and can also be connected to the breadboard. The Nano board proposed herein is approximately 7 grams in weight and 4. 5 cm by..... Listed under: Pinouts

382. Arduino Leonardo Pinout Diagram Arduino Leonardo Introduction: Arduino Leonardo is a microcontroller board that uses ATmega32u4 (datasheet) as the main chip. Most of these include twenty digital I/O pins out of which seven can be used as PWM outputs and twelve can be used as analog inputs, sixteen mega..... Listed under: Pinouts

383. Arduino Projects: Digital Audio Recorder Being able to capture sound, store it and play it over and over again never fails to leave me in awe of its pioneers, from Thomas Edison to Alan Blumlein, the British electrical engineer who, in 1931, invented 'binaural recording' – what we now call..... Listed under: Sound – Audio Projects

384. Toll Tax System using Arduino: Ultrasonic Sensor with Servo Motor Toll Tax System Project: Hello to all readers, our goal is to create a Toll Tax System using Arduino, Ultrasonic Sensor, and Servo Motor. The steps to create an automated toll tax system with an Arduino Uno will be outlined in this article. We provide..... Listed under: Motor Projects

385. An FM Stereo Broadcaster PLL using Arduino I own two excellent AM transmitters - one is homemade with a single 6888 Tube and the other is a restored old KnightKit Broadcaster. Additionally, I have a high-quality solid state transmitter from SSTRAN that I use to broadcast music to my collection of repaired..... Listed under: Projects, Radio Projects

386. Arduino-Based Smart Parking System with IR Sensor Integration Good day, ElectroDuino community! We are delighted to have all of you back to our site. In today's session we will be learning the Smart Parking System Project based on Arduino, IR Sensors and servo Motors. The above considerations of explaining the project concept, thinking..... Listed under: Sensor – Transducer – Detector Projects

387. Arduino DC-DC Boost Converter Design Circuit with Control Loop This article will discuss the process of utilizing an Arduino Uno to effectively manage a boost converter with a power output of at least 10 watts. By utilizing only a few components such as an inductor, capacitor, diode, and a FET, it is possible to..... Listed under: Other Projects

388. Arduino Mega Pinout Diagram Arduino Mega Introduction: An Arduino Mega is an electronic circuit board known as a microcontroller that uses ATmega1280. This offers 54 pins, which can be set to input and output variations, and 14 for analog and pulse output signals. There are also 16 analog input..... Listed under: Pinouts, Projects

389. esp32 devkit v1 pinout GPIO pins of ESP32 DEVKIT As previously stated, the chip on this board contains 48 GPIO pins, although not all pins are reachable via dev boards. The ESP32 devkit features a total of 36 pins, with 18 pins located on each side of the board,..... Listed under: Pinouts

390. Open source multi-channel EEG/ECG/EMG Introduction Electrodes on the skin are used to detect muscle (EMG), brain (EEG), and heart (ECG/EKG) functions.

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

391. IoT for coins Need to organize your coins? Get some help with this project. Things used in this project Hardware components Arduino MKR1000 × 1 ATX Power Supply × 1 Adafruit coin acceptor × 1 Adafruit Proto Screw Shield × 1 Adafruit GRAPHIC ST7565 POSITIVE LCD (128X64) WITH..... Listed under: Internet – Ethernet – LAN Projects, Projects, Tutorials

392. Simple Arduino Wireless Mesh Create an inexpensive basic wireless mesh network with arduinos and long range APC220 radio modules. Wireless mesh networks have the ability to accommodate non-functioning individual nodes and are resilient in challenging environments like forests and hills, where direct data transmission between points may be limited..... Listed under: Wireless Projects

393. The DIY Arduino Telescope GOTO control project Why make your own Arduino control system? Once I finished building my homemade telescope mount, I installed a Meade DS motor kit to power it. This system was very sluggish, lacking in power, and untrustworthy. I couldn't modify the programming or upkeep the system either..... Listed under: How To – DIY – Projects

394. ARDUINO LIBRARY FILES PROTEUS The Proteus simulation software is most effective for evaluating microcontroller projects, although it offers limited insight. Proteus libraries for Arduino include models for Arduino Mega1280, Arduino UNO, and Arduino Pro in Proteus. Projects that involve electronics, Arduino library files in Proteus - "Arduino projects." The..... Listed under: Arduino Programmer Projects

395. Small Arduino DMX controller In this article, we demonstrate how to create a compact and practical Arduino DMX512 controller that can be used to operate a smoke machine with DMX or for testing purposes. Arduino Mega, Arduino UNO, and other similar devices can be utilized with minor modifications. Only..... Listed under: Sensor – Transducer – Detector Projects

396. ESP32-WROOM-32 (ESP-WROOM-32) This guide describes the pinout of the ESP32 development board and concentrates on ESP32 devkit, in particular. Actually, the ESP32 devkit comprises of the ESP-WROOM-32 which actual implementation we shall be implementing throughout the two main modules. It is worth admitting that there are several..... Listed under: Pinouts

397. Exploring the Fusion of Physical Computing and Creative Expression What is physical computing? Physical computing involves constructing physical interfaces that interact with the analog world. This entails assembling circuits using microcontrollers, wires, sensors, LEDs, motors, and similar components, which are then controlled by customized software. For example, one might program the software to activate..... Listed under: Other Projects

398. Random Sensor Project KY-027 Magic Light Cup Module Sensor Description The KY-027 Magic Light Cup module consists of two boards, each equipped with an LED and a mercury tilt switch. By utilizing PWM to control the LEDs on both modules, you can simulate the visual effect of light "magically" transferring between them when they..... Listed under: Arduino LED Project Ideas

399. Surveying Altimeter for Water System Design Project Background Designing a water system necessitates estimating water pressure throughout, often referred to as "head," which denotes the vertical column of water height producing that pressure. Pump specifications typically detail the head, indicating a pump with 150 feet of head can lift water vertically..... Listed under: Other Projects

400. BOOST CONVERTER USING ARDUINO 1. Introduction As the portable electronics industry has advanced over the years, various requirements have emerged, including longer battery life, smaller and more affordable systems, brighter full-color displays, and increased talk time for cellular phones. The growing demand for power systems has made power consumption..... Listed under: How To – DIY – Project Ideas

401. Flex-It: The Ultimate Flex Sensor Showdown If you and a friend have ever wondered who is better at flexing a flex sensor just right, you can now settle it with Flex-it. Flex-it is my second original project using the SparkFun RedBoard. Flex-It: The Flex Sensor Game The Flex-It is a small..... Listed under: Game – Entertainment Project Ideas

402. Arduino Sketcher: Drawing with Processing & SparkFun Redboard This project, dubbed the Arduino Sketcher, is a straightforward device designed for drawing pictures on your computer screen. Utilizing a processing code and the SparkFun Redboard, it simplifies the process of creating digital art. Device Description and Functionality The device consists of four push buttons:..... Listed under: Development Board – Kits Projects

403. Tweet-O-Temp: Tweeting Temperatures with SparkFun Redboard The Tweet-O-Temp includes a temperature sensor that continually monitors its surroundings. It

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

404. System for detecting objects using Arduino Project Abstract I've been exploring the idea of creating a robot using Arduino technology for a while now. This project marks the initial phase of this ongoing hobby endeavor. The aim is to construct an object detection system that can be integrated into a semi-autonomous..... Listed under: Sensor – Transducer – Detector Projects

405. Building an Accelerometer-Controlled Cart The accelerometer cart marks my second intermediate project creation. Essentially, it's a compact robot designed to interpret signals from a triple-axis accelerometer, adjusting its movement direction accordingly. Building the Accelerometer Cart The Accelerometer Cart employs a triple-axis accelerometer to determine the direction in which the..... Listed under: Robotics – Automation Projects

406. Building and Programming a Snake Game with Gameduino For my physical computing class, I completed a final project using the SparkFun Redboard. I named it "Gameduino Snake" because it is a compact, handheld device that enables users to play a Snake game on an LED matrix. Project Overview: Gameduino Snake The game features..... Listed under: Game – Entertainment Project Ideas, Game – Entertainment Projects

407. Arduino microcontroller based laser diode controller 1. Introduction & Background Theory 1.1 Objective The objective of this project is to research, analyze, design, fully implement, and program an Arduino Uno microcontroller board to achieve PI control of the output power of a laser diode. Laser diodes require variable current sources for..... Listed under: Other Projects

408. Portable GPS Watch: Revolutionizing Fitness Tracking My Idea Whenever I go for a run, it bothers me to carry my phone just to track my activity. Those arm bands people use to hold their phones seem awkward to me. If you want to track your runs without carrying a phone, you..... Listed under: GPS Based Project Ideas

409. DESIGN OF A NAIL MAKING MACHINE SUITABLE FOR THE LOCAL COTTAGE INDUSTRY Chapter 1: Introduction 1.1. Nails, Nail making and nail making machine 1.1.1 Nails Nails, slender pin-shaped objects crafted from hard metal or alloy, serve as fasteners in various applications. Typically composed of steel, they are often treated with coatings to resist corrosion in harsh environments..... Listed under: CNC Machines Project Ideas

410. Arduino's Explosive Growth: Powering Innovation Worldwide Introduction Since its inception in 2005, the Arduino Project has witnessed the sale of over 500,000 boards globally. Unofficial clone boards likely surpass this number, suggesting a presence of over a million Arduino boards or their variants worldwide. Its popularity is on the rise as..... Listed under: Other Project Ideas

411. Real-Time Body Temperature Tracking via IoT and LoRa Networks Using Arduino Featured Application The research project described in the paper seeks to develop a real-time human body temperature tracking system using the Internet of Things (IoT) and LoRa wireless network technologies. Specifically, an Arduino microcontroller is used to interface with a body temperature sensor and transmit..... Listed under: Temperature Measurement Projects

412. Design and Implementation of an Arduino-Based Solar Tracking System 1. Introduction (1) Purpose A conventional solar panel typically converts only 30 to 40 percent of incident solar irradiation into electrical energy. To ensure a consistent output, an automated system capable of continuously adjusting the solar panel's orientation is necessary. Addressing this need, the Sun..... Listed under: Solar energy projects

413. How to Make PCBA for High/Low Voltage Protection Sometimes voltage fluctuations occur in the main electricity supply in our homes offices etc. These fluctuations can occur due to the interruption of heavy load, lightning and switching impulses. This can lead to the electronics part damage and sometimes causes major accidents. Voltage fluctuation or..... Listed under: Metering – Instrument Projects

414. Empowering Innovation: An Arduino Seminar Arduino interface boards serve as enchanting tools for individuals with a flair for innovation. They empower engineers, artists, designers, hobbyists, and tech enthusiasts to transform their concepts into reality. These accessible boards provide an economical gateway into the realm of electronics. Envision crafting interactive artifacts,..... Listed under: Other Projects

415. IoT Based Smart Mine Safety System Using Arduino Significance Addresses critical safety concerns in mining which is inherently hazardous work Leverages IoT and Arduino to develop a comprehensive safety monitoring system Has potential to significantly reduce accidents and improve standards if implemented widely Methodology [caption id="attachment_84755" align="aligncenter" width="391"] Fig. 1 Block Diagram of..... Listed under: Security – Safety Projects

416. Arduino Microcontroller Guide: Getting Started with DIY Electronics 1 Introduction 1.1 Overview The Arduino microcontroller, a user-friendly yet robust

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

417. Crafting Your Unique Arduino Creation: A DIY Project Guide Build Your Own Arduino Using affordable components and a solderless breadboard, you have the ability to swiftly and effortlessly construct your own Arduino setup. This approach proves invaluable for prototyping new design concepts or when avoiding the need to dismantle existing setups for Arduino usage..... Listed under: Arduino Programmer Projects

418. Remote Control: Interacting with an Arduino via Web Interface Upon acquiring my initial Arduino board, my immediate aspiration was to administer it through a web interface. However, lacking an Ethernet shield initially, I deferred the idea. Recently, spurred by curiosity, I procured a shield from Amazon to explore the possibilities. The foremost step entailed..... Listed under: LED Projects

419. Exploring Arduino: How it Operates and its Versatile Applications Arduino is an open-source hardware platform consisting of a board equipped with a microcontroller and a development environment (software). It is specifically crafted to simplify the integration of electronics into diverse interdisciplinary projects. Today, we'll delve into understanding Arduino and its defining features. Arduino stands..... Listed under: Arduino Programmer Projects

420. Mastering I2C: Interfacing Arduino Boards for Seamless Communication In this project, we will establish I2C communication between two Arduino boards. Additionally, we will revisit some fundamentals of Arduino I2C communication, serving as a concise recap of what we've previously covered in detail in an earlier Arduino I2C Tutorial. We will explore all three..... Listed under: Other Projects

421. Arduino SoftwareSerial Mastery: Harnessing Multiple Serial Ports Description: This article delves into the Software Serial library, a commonly utilized resource in Arduino programming. It explores its significance in programming for Arduino Uno or Arduino Nano and provides insights into when and why to employ this library. Through the aid of a Proteus..... Listed under: Other Projects

422. Using Arduino as an ISP: Burning Bootloaders onto AVR Microcontrollers Introduction At times, incorporating AVR microcontrollers into electronic projects becomes necessary. However, beginners might encounter challenges in comprehending the process of uploading or burning code onto an AVR IC. Burning bootloaders onto AVR microcontrollers can be facilitated with the assistance of an Arduino board, particularly..... Listed under: Development Board – Kits Projects

423. Arduino Uno Projects: Entry-Level Innovations for Beginners The Arduino UNO, developed around the ATmega328P microcontroller, boasts a versatile array of features. With 14 digital I/O pins, including 6 PWM outputs, along with 6 analog inputs and a 16 MHz quartz crystal, it offers ample flexibility for various projects. Additionally, it comes equipped..... Listed under: Arduino Android

424. Harnessing Monitoring Capabilities: Rasp Pi 3B Network Adapter The Raspberry Pi 3B+ (as well as all other Raspberry Pi models currently available) comes equipped with built-in WiFi functionality. The "wlan0" interface serves as the default connection gateway alongside Ethernet, yet it lacks the capability to enter "monitoring mode." In this guide, we'll demonstrate..... Listed under: Internet – Ethernet – LAN Projects

425. Building a DIY Digital Voltmeter with Arduino: A Beginner's Guide Creating a straightforward digital voltmeter with an Arduino and a 16x2 liquid crystal display (LCD) is a straightforward process. Measuring voltages with an Arduino is relatively uncomplicated. The Arduino provides multiple analog input pins that link to an internal analog-to-digital converter (ADC). The Arduino ADC,..... Listed under: Development Board – Kits Projects

426. Arduino's Dynamic Drive: Exploring 6 Projects with Motor Magic Choosing the Right Arduino Motor This guide on Arduino motors aims to provide fundamental information essential for selecting a motor for your project. If you've been engaged in DIY electronics for some time and feel confident in your skills, you might be seeking a more..... Listed under: Motor Projects

427. From Arduino to Atmega32: A Programmer's Journey with ISP A discourse of "embedded systems" Whether you are cognizant of it or choose to overlook this undeniable fact, you are either in possession of or have utilized an electronic device. This could range from a phone, an ATM machine, a radio, a laptop computer, a gaming..... Listed under: Arduino Programmer Projects

428. Enhancing Projects with Serial Connectivity Between Arduino Boards Description: Serial communication between two Arduino boards - This tutorial covers the process of establishing serial communication between two Arduino boards. While the Arduino Uno or Arduino Mega typically suffices for various projects such as CNC machines or 3D printers, instances arise where a single..... Listed under: Arduino Programmer Projects

429. Particle Photon Email Integration for Arduino Innovations Introduction This tutorial is brought to you by BreakoutBros.com. Access the complete version by

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

430. Mastering Motor Control: 6 Innovative Arduino Projects Choosing the Right Arduino Motor In this guide on Arduino motors, we'll delve into fundamental details essential for selecting the right motor for your specific project. If you've been immersed in the realm of DIY electronics for some time, feeling assured of your skills, you..... Listed under: Motor Projects

431. Smart Home Automation Using Arduino: A Comprehensive Guide for Engineers Arduino serves as a foundational device for constructing electronic projects. It comprises a pre-programmed microcontroller or integrated development environment for coding and uploading onto the physical board. These devices facilitate the creation of interactive objects, receiving input from diverse sensors and managing motors, lights, and..... Listed under: Home Automation Projects

432. Arduino Pathways: How to Make Informed Decisions My initial encounter with Arduino through this assignment marked my first independent experience. Reflecting on the challenges I faced during the in-class tutorial, I harbored reluctance towards reengaging with the breadboard. Consequently, I made an early decision to opt for a more uncomplicated circuit. While..... Listed under: Other Projects

433. Implementing Automation: TSOP 1738 Sensor and Arduino Applications Introduction Hello, tech enthusiasts! Welcome once again to Techatronic. We trust that you're familiar with the concept of automation, which happens to be quite popular these days. In this piece, we'll delve into the process of automating three LEDs utilizing a TSOP 1738 sensor module..... Listed under: Sensor – Transducer – Detector Projects

434. IoT Air Quality Sensor In this Instructable, I will walk you through the steps to build an IoT Air Quality Sensor. This is an inexpensive air quality sensor with reasonable accuracy and is accessible to internet through WiFi. This project is to integrate 3 sensors that detect different kinds..... Listed under: Sensor – Transducer – Detector Projects

435. Arduino Frequency Counter Tutorial for Electronics Enthusiasts In this guide, learn to construct a frequency counter device utilizing an Arduino UNO board. This device showcases signal frequency values on a 1602 LCD screen. It is designed specifically to measure the frequency of PWM signals that have a peak voltage of 5V. Hardware..... Listed under: LCD Projects

436. Android App-Enabled WS2811 LED Control with Arduino via Bluetooth Hello everyone, welcome back to Techatronic. Today, we're diving into an exciting project centered around illuminating effects. You might have come across RGB and pixel lighting in various settings such as decorations, vehicles, and even light bulbs. Our focus today is on working with WS2811..... Listed under: Bluetooth Projects

437. Arduino-Based Smartphone-Controlled Light System Hello everyone, welcome back to Techatronic. Currently, phone-controlled lighting has become quite prevalent and easily available in the market. However, today, we'll demonstrate how to create a similar system at a significantly lower cost. This phone-controlled lighting setup is versatile and can be utilized anywhere..... Listed under: Phone Projects

438. Arduino-Based Medication Alert System with RTC Integration Greetings everyone, welcome back to Techatronic. In this latest article, we're presenting a highly beneficial project known as the Medicine Reminder. This particular creation aims to assist individuals who require medication. Essentially, it comprises a box equipped with multiple drawers, three of which have the..... Listed under: Medical – Health based Projects

439. Arduino-Powered Bidirectional Counter with IR Sensor Hello everyone, welcome back to Techatronic. Today, we're diving into a highly practical project – the Bidirectional Counter. Our goal with this project is to tally individuals passing through the sensor. Bidirectional counters have become increasingly prevalent, especially aiding us during the pandemic. They find..... Listed under: Sensor – Transducer – Detector Projects

440. Creating a DIY Laser-Based Room Security Alarm A laser security alarm stands out as a highly effective system designed to detect any object or individual's presence. Within a designated room, multiple laser beams are often employed. Reflective mirrors are commonly utilized to create a laser grid. When any object intersects these beams,..... Listed under: Clock – Timer Projects

441. Arduino-Powered Door Automation with Motion Sensor Introduction Hello enthusiasts, welcome back to Techatronic. Have you ever encountered an automatic door that seamlessly opens and closes on its own? In this guide, we'll demonstrate how you can craft your very own automatic door opener using a sensor and Arduino UNO. Typically, these..... Listed under: Sensor – Transducer – Detector Projects

442. How To Make An Arduino Game Controller Introduction Creating your own game controller using an Arduino board can be an exciting and rewarding project

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

443. Exploring Arduino: LED Control using Rotary Encoder Introduction Hello everyone, welcome back to Techatronic. Within this article, we'll be creating an Arduino LED project using a rotary encoder and a 16x2 LCD module. To ensure ease of understanding, we've included circuit diagrams and detailed connection descriptions for each setup. The rotary encoder..... Listed under: LED Projects

444. Mastering Arduino Servo Control: A Comprehensive Tutorial Introduction Hello enthusiasts, welcome back to our latest post featuring Arduino UNO. In this article, we'll demonstrate how to create your own Arduino servo control remote system. This setup involves utilizing an IR remote control for wireless signal transmission, coupled with a TSOP IR receiver..... Listed under: Motor Projects

445. Arduino GSM Communication: Calling and Messaging Tutorial Introduction Hello everyone, welcome back to our latest post. Are you familiar with a GSM module? In this article, we'll explore making calls and sending messages using Arduino and the GSM module. If you're new to understanding how a GSM module operates with Arduino, we..... Listed under: Other Projects

446. Enhancing Safety: Arduino-Based Smart Helmet for Accident Detection Hello everyone, welcome back to Techatronic. The smart helmet encompasses a range of functionalities including navigation, call management, accident detection, alcohol sensing, and various other features aimed at transforming the helmet into a smart device. Prioritizing the safety and security of the rider, this helmet..... Listed under: Medical – Health based Projects

447. ROBOTIC ROSE OF ENCHANTMENT DROPS PETALS ON COMMAND In Disney's 1991 film Beauty and the Beast, an enchantress curses the young (10 or 11-year-old) prince to beast-hood for spurning her based solely on her appearance. She gives him a special rose that she says will bloom until his 21st birthday, at which time..... Listed under: Robotics – Automation Projects

448. Arduino UNO LCD Game: An Entertaining Display Project Introduction Mastering Arduino programming is a straightforward endeavor. All you require is a computer and a bit of time. Among the significant Arduino programming simulators available, Wokwi stands out. Why, you ask? Find out here. This article demonstrates the process of interfacing the LCD1602 with..... Listed under: Game – Entertainment Projects

449. Innovative Keyless Bike Technology: Arduino and Android App Integration Interested in starting your bike without a traditional key? Absolutely! We've developed a project tailored for tech enthusiasts eager to incorporate advanced technology into their bikes. Through our keyless bike project, you gain full control over your bike, including engine start and ignition. Additionally, you..... Listed under: Other Projects

450. Ultimate Control: NRF 24L01 Remote for RC Cars and Planes Hello, welcome back to Techatronic, fellow enthusiasts. Today, we're excited to showcase our latest project: the NRF Remote Control designed specifically for RC cars. This innovative remote is capable of controlling various car models. Additionally, it requires an accompanying device installed within the car or..... Listed under: Other Projects

451. Exploring the Best: Top 10 Arduino Projects That Define Creativity The Arduino platform has gained immense popularity, especially among newcomers to electronics. Unlike previous programmable circuit boards, Arduino simplifies the process by eliminating the need for additional hardware to load new code; just a USB cable is all that's required. If you're keen on delving..... Listed under: Other Projects

452. Hands-On Arduino Uno Projects for Engineering Beginners The Arduino UNO, powered by ATmega328P, stands as a microcontroller equipped with 14 digital I/O pins, among which 6 facilitate PWM output. Additionally, it features 6 analog inputs, a 16 MHz quartz crystal, a USB connection, a power jack, an ICSP header, and a reset..... Listed under: Development Board – Kits Projects

453. Arduino Magic: Building an Easy EMF Detector from Scratch The EMF detector showcased in this video utilizes a minimal number of components, making it straightforward to construct without the need for any tuning. It functions excellently right from its initial power-on, requiring no adjustments. Project description An EMF (electromagnetic field) meter serves the purpose..... Listed under: Other Projects

454. Illuminate Your Space: Crafting an Arduino Sunflower Introduction Arduino isn't solely for complex projects; it can also serve as a platform for simpler ones, imparting valuable skills to beginners. Our aim is to demonstrate the fun side of electronic components, educating others about circuits and components. In this tutorial, let's embark on..... Listed under: Other Projects

455. Arduino IDE: Transforming Digital Electronics in PHYS 432 Introduction This guide provides a concise overview of initiating Arduino microprocessor

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

456. Sound Off: Silencing Noise Pollution with Arduino and IoT Increasing noise levels have become a major issue in many urban areas today due to factors like population increases, urban development, and technological advancements. Moreover, excessive noise from a neighbor or colleague can seriously impact one's well-being and quality of life. Conversations conducted at high..... Listed under: Sound – Audio Projects

457. Enhance Home Security with a DIY Arduino Window Alarm Annunciator This project demonstrates an Arduino Uno-based window alarm annunciator system. Annunciators are commonly employed in industrial settings like manufacturing facilities, power plants, and other process operations to monitor changing plant conditions. The annunciator alerts operators to any abnormal or deviant parameter readings that require attention..... Listed under: Security – Safety Projects

458. Craft Your Own Wireless Frequency Meter with Arduino: A DIY Guide This project details the development of a wireless Arduino frequency meter capable of determining the frequency of AC sinusoidal waveforms between 50Hz and 3kHz. Figures 1 and 2 depict the prototype hardware constructed for the transmitting and receiving functions. Figure 1 shows the transmitting circuit..... Listed under: Wireless Projects

459. Track Your Valuables with the Unbeatable Power of Arduino and GPS! It is common for parents to feel concern for their children when they are apart. Questions arise around whether the kids made it safely to school, if they are alone at home, or playing with friends at the park. Ensuring a child's well-being when..... Listed under: GPS Based Projects

460. Grab Control of Industrial Automation with This DIY Joystick System This system allows remote control of up to four industrial devices using a joystick and Arduino Nano microcontroller board. Figure 1 presents a block diagram of the joystick-controlled industrial automation setup. Key components include: An Arduino Nano which processes signals from the joystick and outputs..... Listed under: Other Projects

461. Smart Washroom: Experience Hands-Free Lighting with IR Sensors This Arduino Uno and IR sensor-based system automatically controls the lighting in a bathroom connected to AC mains power. The IR sensors detect when a person enters or exits the room. Upon detection of entry, the light bulb or tube light is immediately switched on..... Listed under: Sensor – Transducer – Detector Projects

462. Bluetooth 5.3 SoC: The Future of Wireless Connectivity Description The BlueNRG-LPS is an ultra-low power programmable Bluetooth Low Energy wireless system-on-chip (SoC) solution from STMicroelectronics. It includes highly optimized 2.4 GHz radio IPs for excellent radio performance and minimal power consumption, allowing for exceptional battery life. The BlueNRG-LPS supports Bluetooth Low Energy 5.3,..... Listed under: Bluetooth Projects

463. Arduino Programming with .NET and Sketch Introduction Arduino serves as a development platform for creating embedded applications, incorporating a variety of sensors and actuators. It relies on open-source hardware, offering a range of Arduino models for your development needs. This book is tailored for developers, particularly those proficient in .NET, who..... Listed under: Arduino Programmer Projects

464. Ultrasonic Security System This tutorial provides a straightforward guide for crafting a small security device with an Arduino. Step 1: Assemble Materials Step 2: Setup Attach a red wire from the 5V pin on the Arduino to the positive segment of the breadboard. Establish a connection with a..... Listed under: Security – Safety Projects

465. Sensors Guide The intention behind this guide is to furnish valuable insights into the typical sensors employed in the RAD SLDP. It's worth noting that sensors produced by various manufacturers might have slight variations compared to the ones outlined in this guide, but comprehensive documentation for all..... Listed under: Sensor – Transducer – Detector Projects

466. 17 Cool Arduino Project Ideas for DIY Enthusiasts Arduino is a versatile platform that seamlessly integrates open-source software and hardware, enabling individuals to effortlessly develop interactive projects. You can acquire single board computers compatible with Arduino and employ them to craft practical inventions. Beyond the hardware, proficiency in the Arduino language and utilization..... Listed under: Other Project Ideas

467. Awesome Arduino Projects for Engineers and Students Are you in search of intriguing and innovative Arduino project ideas? Look no further! Below, you'll find an assortment of captivating and distinctive project concepts that can be pursued with Arduino. These projects span a broad spectrum of applications, including home automation, the creation of..... Listed under: Temperature Measurement Projects

468. Create a PCB light panel with touch capacitive technology for managing a NeoPixel LED strip In this guide, we will illustrate the process of crafting a touch

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

469. Compact Soil Moisture Monitoring Device for IoT with Low Power Consumption Many soil monitoring sensors are available, compatible with Arduino and other embedded modules, making them suitable for programming in different project domains, including Smart Agriculture Monitoring Systems. However, a challenge arises due to the lack of a standardized, versatile module that can be easily adapted..... Listed under: Other Projects

470. Machine for Cutting Resistor Reels Utilizing Arduino Technology Introduction In advanced electronics PCB assembly lines, pick and place machines are typically used to retrieve components from an SMD reel and position them on a PCB. However, this becomes impractical for medium-scale production or when employing THT (through-hole type) components on your PCB. This..... Listed under: Other Projects

471. Creating an Animatronic Eye with Arduino Using 3D Printing Introduction In this endeavor, we're embarking on the construction of an Arduino-based animatronic eye. The inspiration for this project was born during my online quest for innovative project ideas, and this concept instantly captivated my interest. Firstly, its aesthetic appeal combined with a straightforward mechanism..... Listed under: Robotics – Automation Project Ideas

472. Exploring Arduino: An Open-Source Platform for Creative Electronics Prototyping Introduction Arduino represents an open-source electronics prototyping platform built upon versatile and user-friendly hardware and software components. Its purpose is to cater to artists, designers, hobbyists, and individuals keen on crafting interactive objects or environments. Getting Started with Arduino UNO The Arduino platform offers a..... Listed under: Other Project Ideas

473. Importance of Sensors in Robotics and Interfacing with Arduino Sensors are essential for the functioning of senses. Within the field of robotics, the fundamental senses rely on basic sensors, such as mechanical switches that detect object contact, and photosensitive resistors and transistors that identify the presence or absence of light. Remarkably, a robot can..... Listed under: Robotics – Automation Project Ideas

474. Temperature Measurement and Control In addition to its roles in controlling motors, LCDs, and LEDs, the Arduino also possesses the capability to gauge temperature measurement. By connecting an analog temperature sensor to the Arduino, it can function as an electronic thermometer. This section will guide you through the process..... Listed under: Blog, Temperature Measurement Projects

475. Temperature Control of a Lightbulb Required Equipment lightbulb (incandescent, LED, CFL, etc.) AC solid-state relay (hockey-puck type, etc.) temperature sensor (TMP36, etc.) Arduino board (e.g. Uno, Mega 2560, etc.) In this example, the temperature of the lightbulb is gauged using a TMP36 sensor. This sensor is cost-effective, reasonably accurate, and..... Listed under: Temperature Measurement Project Ideas

476. Keypad Input Processing: Basic Procedure and Applications Keypad Description The Significance of Keypads as Input Devices and their Role in Various Applications Keypads serve as essential input peripherals for data entry, similar to how keyboards are crucial to computers. Numerous applications heavily rely on users providing fundamental inputs, much like those available..... Listed under: Other Project Ideas

477. Voice-Controlled LED System Using HC-05 Bluetooth Module and Smartphone Summary In this undertaking, we'll employ an HC-05 Bluetooth module alongside a smartphone for transmitting vocal instructions to oversee LEDs and to accept voice directives. Our approach involves utilizing an "Arduino Bluetooth Voice Controller" Android application, readily downloadable from the Play Store. The microphone captures..... Listed under: Bluetooth Projects

478. Gesture Sensor Control Using Arduino The DF Robot Gravity sensor now combines gesture controls and touch switches, offering an expanded array of combinations to manage the ON/OFF switch. Narrative This sensor module combines gesture recognition and touch detection capabilities into a single unit, offering an adaptable detection range spanning from..... Listed under: Sensor – Transducer – Detector Projects

479. Creating a Fire Detector with Omniverse Replicator and Arduino Nicla This project serves as a proof-of-concept, showcasing the utilization of TinyML and a synthetic dataset for the purpose of fire detection. Story The threat posed by fires is of utmost concern to humanity, emphasizing the crucial need for reliable detection. Current flame sensors are constrained..... Listed under: Other Project Ideas

480. [Password Box] Arduino One Touch Password Input (USB Keyboard Hack) Today is the world of internet social. We have many social platform Email, Facebook, Instagrams, Twitter, Instructables and etc.For security issue we should not use the same password for these platform and some platform enforce us to create password that difficult to remember. It is..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects

481. Lane Tech PCL Amazon Alexa PC Boot and Heater start Initiate the activation of a computer and the operation of a space heater using either Amazon Alexa or

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

482. General Purpose Relay Timer Story Throughout my years of experience, I've created numerous timers and encountered a plethora of mobile apps. However, when I found myself in need of a straightforward solution to seamlessly automate the on-off cycle of a circuit I was actively developing, none of the available..... Listed under: Other Project Ideas

483. Remote control of a multi-light chandelier with Arduino Story: It all began with a seemingly simple intention – replacing the bulbs in the chandelier adorning my bedroom. As you can observe in the accompanying image, the chandelier boasts an elegant design. Yet, a minor predicament emerged. To begin with, the fixture comprises a..... Listed under: Blog, LED Projects

484. Utilizing the W5300 TOE Shield with Arduino IDE and STM32 Nucleo-F429ZI: A Comprehensive Guide Narrative 0. Preface This guide is dedicated to instructing you on the utilization of the W5300 TOE Shield in tandem with the Arduino IDE, particularly when paired with the STM32 Nucleo-F429ZI board. Within this document, we shall furnish a comprehensive, step-by-step tutorial encompassing the configuration..... Listed under: Blog, Other Project Ideas

485. Recommended Approach to Programming and Hardware Development: C++ and Arduino Framework Story Rapid Overview of the Seed Studio Grove Kit Frequently, people inquire about the optimal approach to delve into programming and hardware development. The response consistently points to the C++ language and, notably, the Arduino framework. While the software aspect is well-defined, what about the..... Listed under: Blog, Other Project Ideas

486. Introduction to the Arduino Project: An Open Source Experimental Aircraft PFD Manual The Open Cockpit Arduino 4.3 Version 1.0 Beta The Arduino project is a PFD (Primary Flight Display) for experimental aircraft, built on Arduino's open-source platform. Its purpose extends to both educational and experimental contexts. Further enhancements are anticipated, aiming to provide an affordable backup instrument..... Listed under: Blog, Other Projects

487. Objective of the Experiment: Arduino Microcontrollers Applications with Switches and Sensors I. Objective The main goal of this experiment is to familiarize oneself with the utilization of the Arduino microcontrollers for monitoring switches and sensors. Additionally, the objective is to trigger devices like LEDs or a speaker based on specific sensor output values. II. List of..... Listed under: Blog, Sensor – Transducer – Detector Project Ideas

488. Making Sounds with Arduino The limited funding and job opportunities in the humanities field make it challenging for emerging scholars to pursue additional knowledge. As scholars must acquire extensive knowledge within their respective disciplines, they must also create coherent projects within an academic context. This situation creates difficulties for..... Listed under: Sound – Audio Projects

489. Controlling DC Motors and Servo Motors with Arduino and Processing GUI The workshop demonstrates how to control motors using Arduino and Processing In today's workshop, participants will learn how to control two types of motors, namely DC motors and servo motors, using the Arduino board. The workshop will make use of firmata and a Processing to..... Listed under: Motor Projects

490. Biomedical Device Introduction and Overview Biomedical engineering, a highly interdisciplinary field within STEM, offers opportunities for engineering and computer science students to engage in its endeavors. It involves the application of biology and engineering principles to create novel devices aimed at enhancing healthcare and medical options. Prominent..... Listed under: Medical – Health based Projects

491. Experiment Objective: Utilizing Arduino Microcontroller for Switches, Sensors, LEDs, and Speaker Control I. Experiment Objective The main goal of this experiment is to gain proficiency in using the Arduino microcontroller to observe switches and sensors and to trigger devices like LEDs or a speaker based on specific sensor output values. II. Required Components List This experiment will..... Listed under: Blog, Sensor – Transducer – Detector Project Ideas

492. Gameduino Snake – Final Project For my physical computing class, I created a project utilizing the SparkFun Redboard. I've named it the Gameduino Snake, as it's essentially a compact handheld gadget that enables users to enjoy a game of snake on an LED matrix. The game incorporates a basic 8×8..... Listed under: Game – Entertainment Projects

493. DSP Shield The objective of the DSP Shield project is to enhance the accessibility of Digital Signal Processing (DSP) concepts and applications, particularly by introducing DSP as a teaching tool for signal education at the undergraduate level or even earlier. The project aims to bridge the gap..... Listed under: Other Projects

494. Extra inputs for Arduino with a keyboard The Arduino is perhaps the coolest thing on earth. There are many types, the Uno, the Mega, the Pro, the Pro Mini, etc.

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

495. Analyzing The Arduino Developer Community Paraphrased: "Arduino creates open source hardware and software, specifically focusing on microcontrollers, for educational and prototyping endeavors. Those familiar with me are aware of my passion for exploring Arduinos and Raspberry Pi. While I don't aspire to be an electrical engineer, I'm primarily drawn to..... Listed under: Development Board – Kits Projects

496. Introduction to Arduino: A Versatile Physical Computing Platform Arduino Interfacing Introduction to Arduino: Arduino serves as a medium for engaging with the physical world through sensors. It constitutes an open-source physical computing platform centered around a straightforward and affordable micro-controller board, accompanied by a development environment tailored for writing software compatible with the..... Listed under: Arduino Battery Project Ideas, Other Project Ideas

497. Easy Electronics Organization using Arduino Like many other electronic enthusiasts I need to have a constant supply of materials in order for us to keep building, hacking, or just playing around with electronics. However as probably any of us have come to realize we need a lot of space and..... Listed under: Home Automation Projects

498. A Planar 2-DOF Haptic Device for Exploring Gravitational Fields For our project, we built a planar, 2 degree-of-freedom haptic device for educational use. The design is based on a 5-bar mechanism. We wanted to build a device that would have the versatility to teach various concepts, but would still be relatively affordable (as the..... Listed under: Sensor – Transducer – Detector Projects

499. X-Track – Wireless music visualization and tracker X-Track is a prototype wireless device which connects you to the music, by providing entertainment with its bright beat-synched LEDs and tracking your moves so that you can later learn how much you enjoyed the night, and which parts were especially moving you. Remote wireless..... Listed under: Sound – Audio Project Ideas

500. Make a Musical Bench using Arduino The Musical Bench is an exhibit which makes music when people touch, kiss, or hold hands. It uses a micro-controller to detect changes in resistance, via the copper armrests, and plays high or low notes depending on how much current flows through you and a..... Listed under: Sound – Audio Projects

501. Portable Haptics System Hardware Mobile Phone There is a wide selection of mobile phones on the market. For our development, we chose Nokia 6210 Navigator due to its ability to run Java, accompanied by Bluetooth communication, and its small form factor. The phone mainly acts as a remote control..... Listed under: Sensor – Transducer – Detector Projects

502. Robo-Mobile – A Homemade Bluetooth Robot using arduino Background This robot is one I built to learn. Before this project I did get my feet wet with a few small scale Arduino projects like an ultrasonic robot, (that would move backwards until it was a certain distance away from the wall,) and I..... Listed under: Robotics – Automation Projects

503. Knockdown Warning Indicator (Redux) This week I continued developing a device that warns of the potential of a knockdown – the process by which an over-canvassed sailing ship is lain over on her beam-ends during a squall. The potential for sinking at this point is high, especially if there..... Listed under: Security – Safety Projects, Sensor – Transducer – Detector Projects

504. Bitcoin Price Ticker (almost) from scratch using Arduino as ISP Hello everyone! I decided to create this tutorial on how to make a Bitcoin Price Ticker. Well, this is only a prototype and I will make a smaller edition with a more pleasant design and some other features at a later time. However, this serves..... Listed under: Internet – Ethernet – LAN Projects

505. First Solo Experience with Arduino and Choosing a Simple Circuit with IR Remote and Sensor CHOOSING A DIRECTION For this assignment, I embarked on my inaugural solo experience with Arduino. After facing some challenges during the in-class tutorial, I felt apprehensive about dealing with the breadboard once more. Consequently, I made an early decision to work on a simpler circuit..... Listed under: Sensor – Transducer – Detector Project Ideas

506. Passive Sensors – Detecting Light and Motion Equipment: Arduino UNO microcomputer, PC with Arduino IDE installed, and a USB cable. CdS PhotoSensitive Resistor(s), 10K Ohm Resistor, and Parallax PIR Motion Sensor Passive sensors detect some physical phenomena and provide some amount of information about it that can be used for action..... Listed under: Sensor – Transducer – Detector Project Ideas

507. Arduino Project Challenge: Exploring Sensor Readings and Component Control HW9 – Arduino The Task: In our Arduino project challenge, we were free to

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

508. Machine Design Using Arduino The assignment for this week is to automate the machine assembled two weeks ago. For this Roxanna milled the Arduino's shield for controlling the steppers, but Alejandro found that we haven't all the components for stuffing, specially the A3982 - stepper motor driver, so as..... Listed under: How To – DIY – Projects

509. Redesigning the RA-02 Breakout board module Story The RA-02 Breakout module includes level converters The RA-02 Breakout Module is designed to be beginner-friendly and compatible with breadboards. Many of them may possess one or more RA-02 Breakout modules. For those who do, they are undoubtedly aware of the challenges associated with..... Listed under: Development Board – Kits Projects

510. Ultrasonic sensor HC-SR04 arduino project with code Many times, when parking our cars in the garage, we accidentally scratch them against the walls or cause damage due to a lack of visibility regarding the remaining distance between the car and the wall. To address this issue, we can create a straightforward electronic..... Listed under: Sensor – Transducer – Detector Projects

511. Tracking Cat Eyes via Kinect using Arduino This instructable was made as part of the CS graduate course "Tangible Interactive Computing" at the University of Maryland, College Park taught by Professor Jon Froehlich. The course focused on exploring the materiality of interactive computing and, in the words of MIT Professor Hiroshii Ishii,..... Listed under: Game – Entertainment Projects

512. Build Simon Game Using Arduino High Level Description: For part 3 of the lab, our group decided to build a “Simon” game. Our game setup uses 3 buttons and 4 LEDs. Each button corresponds to one LED and the 4th LED is used to indicate an error. The game starts..... Listed under: Game – Entertainment Projects

513. Our Personal Favourite Arduino Projects for you to Try in 2023 In the realm of do-it-yourself (DIY) electronics and robotics projects, Arduino stands as a prominent open-source microcontroller platform. It boasts a user-friendly nature and enjoys a vast community of users who actively contribute their projects and provide assistance to fellow enthusiasts. Throughout the year 2022,..... Listed under: Arduino Programmer Projects

514. ANDROID BASED ROBOTICS While the field of robotics is continuously expanding at a remarkable rate and better performing robots are created every year, robotics still remains out of reach for many students and researchers. The main reasons for this difficulty are the high complexity of the hardware and..... Listed under: Robotics – Automation Projects

515. Bird Feeder Monitor using Arduino This is a project to monitor the number of birds that visit my bird feeder, as well as record the amount of time spent feeding. I used an Arduino Yún and a capacitive touch sensor, Adafruit CAP1188, to detect and record the birds feeding. On..... Listed under: Home Automation Projects

516. 5x5x5 LED Cube – Orientation Independent 3D Display Introduction Our project, in one sentence, is an orientation independent 3D LED display. We were inspired by various videos on youtube of similar cubes but also by the idea of creating an interactive 3-dimensional display. We built a 5x5x5 LED cube display and controller..... Listed under: LED Projects

517. Talking Arduino Heart Rate Monitor My partner and I wanted to make heart rate monitor that does more than simply measure a user's heart rate. Our heart rate monitor talks! Each button gives a verbal description of its functionality and makes the measurements visible on the screen. This monitor will..... Listed under: Medical – Health based Projects

518. Creating A SoundBox Using Arduino Ideas and Sketches Squat Coach – Detects the depth of your squats and assesses your form. Flex sensor is positioned to run up the back of knee joint Etch-A-Sketch – Arduino version of Etch-A-Sketch game. Users control stylus with 2 rotational potentiometers Adaptive Lighting –..... Listed under: Sound – Audio Projects

519. Digital I/O with Arduino Boards Readings in Physical Computing Ch 6. pgs 87-136 (this week and next week) Ch 7: Serial Communication [137-143; 149-150; 153-161] Before the lab You should have already successfully installed the Arduino environment on your laptop, built the LED circuit, and successfully load/run the “blink” program to..... Listed under: Development Board – Kits Projects

520. The Creepy Doll using Arduino Here at Mikamai, we often organise events and hackathons. After the last hackathon, someone left an old doll, and it was kinda

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

521. IoT based health monitoring system | Arduino Project An Arduino and a generic ESP8266 are utilized in an Internet of Things (IoT) patient health monitoring system. The project's concept involves gathering and transmitting the health information of patients. Project description The term "IoT-based patient health monitoring system" refers to a broad category of..... Listed under: Medical – Health based Project Ideas

522. Open Source Camera Quadcopter Introduction When our team was initially assigned the task of transforming this project from a cinematography quadcopter to a more practical sensor quadcopter, we made the decision to redesign the frame. This decision was not taken lightly, but it was concluded that one of the..... Listed under: Video – Camera – Imaging Projects

523. Catchin' time using Arduino This tutorial will show you how to build an interactive toy for children. This toy wants to give a boost to children to move and play with friends at home or in a park, instead of watching TV and playing videogames. Catchin' time is a..... Listed under: Game – Entertainment Projects

524. Sleep n' Tweet Step 1: The Sleep n' Tweet Now I am lucky enough to work at the greatest company in the world as a University of Waterloo, co-op student. It might not even be a company you've heard of yet. They're named Upverter and we are trying..... Listed under: Home Automation Projects, Internet – Ethernet – LAN Projects

525. Password access with arduino ~~ The complete kit for this tutorial is now for sale at www.razvantech.com Get one! ~~ This instructable will show you how to make a pass-code lock system using the Arduino Mega board. Whenyou type the right code, an LED lights up an the servo..... Listed under: Security – Safety Projects

526. SOLAR TRACKER ARDUINO PROJECT Overview: The solar tracking device is designed to ensure that a flat panel with a solar cell is constantly aligned with the movement of the sun across the sky. It utilizes two light dependent resistors (LDRs) positioned on opposite sides of a fin to measure..... Listed under: Solar energy projects

527. Make Your Pet Dishes Tweet Using Arduino You give your pets everything: Food, water, a home, toys, and love. Why not give them a twitter account? This project allows you to monitor your pets' eating habits and receive alerts when their supplies are low. It's also a cute, fun way to learn..... Listed under: Internet – Ethernet – LAN Projects

528. Animatronic Green-Winged Macaw Papercraft Hello everybody! This macaw was part of a work of biology at the college of my daughter, who was attempting to educate people not to buy wild animals. This beautiful animal, natural tropical forests of South America, is highly coveted by smugglers. In captivity, unlikely..... Listed under: Game – Entertainment Projects

529. USB Mouse Made Out Of A Wii Nunchuck This instructable will describe how to convert a Nintendo Wii Nunchuck controller into a USB 2-button mouse using a Teensy USB. The Teensy USB is a very user-friendly development board that can be programmed in an Arduino environment. The Teensy USB development board and necessary..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects

530. Reddit Controller, USB Upvote/Downvote button Not too long ago I saw the "Awesome Button" video on the Make Magazine podcast. In the video Matt Richardson shows how you can take a Teensy development board and turn it into a simple USB keyboard. In his example everytime a button is pressed..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects

531. Make A Electric Turtle Robot Using Arduino Be sure to check out my new instructable , the 'little Tank'! Really nice tracked design complete with cut files! update: I've had so much response on this instructable, thanks to all. If you end up making one, please let me know! I'd love to..... Listed under: Robotics – Automation Projects

532. LED Microcontroller Debug Module When it comes to debugging a microcontroller circuit, there aren't a lot of simple options. Since a microcontroller circuit might have multiple things going on at the same time, measuring voltages with a DMM isn't an option. Using an computerized In-Circuit-Debugger solution is expensive and..... Listed under: Development Board – Kits Projects, LED Projects

533. Wise Clock 3 – Arduino-based geeky alarm clock Wise Clock 3 is an open-source, highly hackable geeky clock that shows a lot more than the time. Its main

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

534. Make A Giant Leaf Planetarium Using Arduino Have you ever wanted a mini-planetarium for your room? Well now you can! This instructable will help you create a fairly portable planetarium leaf that you can put over a bed, a couch, or anywhere else in your house. All you need is an IKEA..... Listed under: Game – Entertainment Projects

535. Universal Gripper – Syringe Powered The “universal gripper” developed by researchers from Cornell University, the University of Chicago, and iRobot inspired me to create my own version. The YouTube video is quite impressive. The gripper can form around very asymmetrical and smooth shapes and still pick up the object. I..... Listed under: Robotics – Automation Projects

536. The Touch module – a robotic dog toy The idea was to invent an Arduino-based, robotic toy that my dog could interact and play with. One that could record scores, automatically deliver treats, and grow more advanced as the dog learns to play with it. I wanted to find a task to test..... Listed under: Robotics – Automation Project Ideas

537. Arduino Project Board The Arduino Project Board is basically a board to transer your ATMEGA168/328 to when you have completed your project and no longer need to use the Arduino as a development board. Simply transfer the programmed chip from the Arduino board to the Arduino project board..... Listed under: Development Board – Kits Projects

538. Turn your Arduino Uno into an USB-HID-Mididevice While building an Arduino Uno based Midi-Controller for Ableton Live, I came across the HIDUINO project (http://code.google.com/p/hiduino/). It allows you to turn your Arduino Uno (or any other device using an AVR-USB chipset like the 8u2) into a driverless HID/Midi device. It's much..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects, Sound – Audio Projects

539. Arduino Air Quality Sensor Summary The issue of poor air quality is a significant concern that impacts the well-being of numerous communities, particularly individuals with health conditions. The ability to measure air quality accurately is of utmost importance. In this module, you will have the opportunity to construct a..... Listed under: Sensor – Transducer – Detector Projects

540. Rave Rover – Mobile Dance Stage Rave Rover was designed and built to be a portable dance platform for parties, raves, and any other trouble we can get into! I will go into as much detail as I can explaining the entire build process, and where to find parts and other..... Listed under: Game – Entertainment Projects

541. How to hack EEG toys with arduino i had heard a few years back about the ability of hooking up toy EEGs so you can interface them with your computer. I was reminded of this for a project i wanted to do for a class (instructable coming soon ;-)), and i also..... Listed under: Game – Entertainment Projects

542. Building a Portal Turret with motion controlled audio and lighting In this Instructable I'm going to show you how I went about building my very own life size talking Portal Turret from start to finish. This is a fairly in depth project that will cover every stage of construction and all the techniques I used..... Listed under: Sound – Audio Projects

543. Pan/Tilt Motion System for Control Education Pan/Tilt Motion System for Control Education Ricardo G. Sanfelice, University of Arizona Project supported by Mathworks Website developed by Colin Lasharr, University of Arizona Contents Introduction Instructions for Building the System Installation Instructions The Arduino Board Simulink Initial Parameter Identification System Identification for Zenith..... Listed under: Arduino Programmer Projects

544. Hack the Nabaztag using Arduino This is a Nabaztag - Armenian, apparently, for "hare". It's an adorable bunny rabbit packed with sensors and communication devices.... and it's completely unusable. There's people who wrote some interesting software to hack it, and I applaud them: however, I could never actually get my..... Listed under: Game – Entertainment Projects, Robotics – Automation Projects

545. DIY Parking Sonsor using Arduino The last time I was home visiting my parents I noticed bumper imprints caused by my mother suburban on the stairs leading up from the garage. Their garage it turns out is just barely long enough to fit their gigantic vehicles. So I decided it..... Listed under: Car Projects, How To – DIY – Projects, Sensor – Transducer – Detector Projects

546. Using Mozzi Library with 5 potentiometers using arduino Getting Started The goal of this project was to create filters and controls to that can manipulate sound

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

547. Arduino Quilting Machine The Arduino Quilting Machine combines the mechanics of a sewing machine, CNC technology and Arduino as an operating system. The project is designed to translate a vector file from a computer into G-code and subsequently into Arduino language which then moves the machine. The project..... Listed under: CNC Machines Projects

548. Diy Xbox wireless controller adapter for Pc This instructable will go over the steps to connect a RF module from an RROD xbox to your computer so you can use a wireless controller with your computer. ******DISCLAIMER******* DONT TRY THIS IF YOU DONT HAVE ANY EXPERIENCE WITH ELECTRONICS/SOLDERING OR COMPUTERS IM NOT..... Listed under: How To – DIY – Projects, Internet – Ethernet – LAN Projects

549. Make a digital "meow" from analog clock using arduino Is your analog clock just not doing enough stuff? Want to do digital things with an analog clock? This tutorial will show you how to make a Kit Cat Clock play a "meow" sound clip, at precise time intervals, using the Atmega 328P-PU via the..... Listed under: Clock – Timer Projects, Home Automation Projects

550. DIY Telepresence Documentation This is the documentation page for the Spring 2012 DIY Telepresence project. Here you will find schematics, software, and guides for the robot. The goal of the project was to design a low-cost, easy to build telepresence robot. Some of the features include: Segway based..... Listed under: Robotics – Automation Projects

551. Total Recall- Arduino Simon Says on steroids Total Recall is a Simon based game for the Arduino. Your basic Arduino Simon Game consists of 4 buttons, 4 LEDs, an Arduino, some code and maybe a speaker and sound effects. Total Recall takes things a step further by adding an LCD display and..... Listed under: Game – Entertainment Projects, Projects

552. Voice Activated LED Lighting with Arduino This project is an extension to the Speech Recognition with Arduino by leandro4b (http://www.instructables.com/id/Speech-Recognition...). However, instead of using 3 separate colored LEDs, I used a multicolor 4-channel RGBW LED Emitter. I had the opportunity of working at LED Engin last summer, which is why I..... Listed under: LED Projects

553. The Wondrous Weather Cube Using Arduino We created an Internet-enabled companion cube for your computer, which displays different kinds of information by glowing red or green. Depending on its orientation, and which labeled face is oriented upwards, our companion cube displays either stock readings of the NASDAQ or the outside temperature..... Listed under: Home Automation Projects

554. Laser Pointer Switch using arduino This instructable will detail how to make a switch that uses an arduino to sample light. When the light sample reaches a threshold it will trigger a relay that can be used to turn on/off a small appliance (light, radio, fan, etc...) The parts for..... Listed under: Home Automation Projects, Interfacing(USB – RS232 – I2c -ISP) Projects

555. FabECG: a simple electrocardiogram board Technologies for rudimentary physiological sensing are getting cheaper and easier to implement. Consider, for instance, these non-contact sensors from UCSD which can be used to take an EEG through hair or an ECG through a T-shirt! One can even make a simple oscilloscope to digitize,..... Listed under: Medical – Health based Projects

556. Arduino controlled Rotary Stewart Platform This instructable is about building a Rotary Stewart Platform. It allows to position its moving platform in six degrees of freedom. This specific platform is designed to be able to position a DSLR or any other digital camera. This version of Stewart Platform uses instead..... Listed under: Video – Camera – Imaging Projects

557. DC Motors Relays Using Arduino Let's get the math over right off the bat. There are a LOT of attempts to describe how Ohm's Law works, each one nerdier than the last. Here' one I like. Warning: SFWBN (safe for work but nerdy). V = voltage measured in volts -..... Listed under: Motor Projects

558. ATtiny85 POV Display using arduino The first time I saw a POV (Persistence Of Vision) display was on a show called FAQ on TV. The POV display consisted of an oscillating shaft with 6 LED's mounted on the end of the shaft. Since then I have always wanted to make..... Listed under: LED Projects

559. Making art Interactive Using Arduino Unfortunately, due to my need to reclaim my Arduino and breadboards, we don't have photographic documentation of

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

560. Control Keyboard & Mouse Android app via Arduino This instructable will show you how to control your computer's keyboard and mouse with an Android app via bluetooth to an Arduino BACKGROUND Ever wanted to control your computer's mouse/keyboard functionality without having to actually sit in front of it? I do all the time..... Listed under: Arduino Android, Internet – Ethernet – LAN Projects, Projects

561. Augmented Water using arduino The Augmented Water device helps you save water by turning red after one Liter. The device, built by @tamberg during a water hackathon, is made from an Arduino, a flow sensor and coloured LED pixels. Video https://www.flickr.com/photos/tamberg/14346321456/ (thanks kiilo) In case you want to build..... Listed under: Home Automation Projects

562. Blind Maze Navigation using 2-DOF Haptic Joystick The domain of haptics has immense potential as a technology to assist visually-impaired individuals with their navigation of the physical world. In this project, we sought to develop a 2-DOF haptic joystick to provide force-feedback to a user as she attempts to navigate a maze..... Listed under: Game – Entertainment Projects

563. Temperature Displayed on 4 Digit 7 segment using Arduino In this project I'll display the temperature in a 4 digit 7 segment display (common anode). The sensor is the cheapest you can find so actually the temperature changes pretty easily which makes the display to show always different temperatures. But the idea is to..... Listed under: Projects, Temperature Measurement Projects

564. Wiring Harness for the LCD Panel Assembly of the Female Connector Block The wiring harness has a male and female end. The gender of electrical and mechanical parts is described on this Wikipedia page. The header pins that are soldered into the circuit board for the LCD panel are plugged into..... Listed under: LCD Projects

565. Android Accessories Made Easy With Arduino The Android Open Accessory Protocol makes it possible for you to create custom Arduino-based accessories for your Android phone or tablet. Attend this session to learn how to get started, the hardware & software required and how Handbag makes development easier. Content will be useful..... Listed under: Arduino Android, Internet – Ethernet – LAN Projects, Projects

566. Huge Arduino Animatronic LED Eyeball using arduino I'm currently in the process of making a Halloween contraption that has a few components that are worth documenting. The Huge Arduino Animatronic LED Eyeball is one of them. Background Most animatronic eyeball projects that I found were more or less life-size. They were usually..... Listed under: LED Projects

567. Brain-Computer Interface Introduction Our goal was to build a brain-computer interface using an AVR microcontroller. We decided that the least invasive way of measuring brain waves would be using electroencephalography (EEG) to record microvolt-range potential differences across locations on the user's scalp. In order to accomplish this,..... Listed under: Medical – Health based Projects

568. Happy Androids with Arduino Video instructions Arduino + Android Normally smartphone events are tightly coupled to your phone device itself. When your cell phone is ringing, your phone speaker plays a ringtone. When you get a new text message, your phone displays it on its screen. Wouldn't it be thrilling to..... Listed under: Arduino Android, Internet – Ethernet – LAN Projects, Projects

569. Finalized Prototype Using Arduino Shown below is the finalized prototype. The purpose of the prototype was to demonstrate the feasibility of a small, highly maneuverable search and rescue robot. As such, the completed prototype was successful. Capabilities include a ground speed of 10 inches per second, battery life of..... Listed under: Development Board – Kits Projects

570. Line Following Robot using arduino This is a Line Following Robot. It follows a black line that is drawn. It is able to detect the black line through one photocell and one analog light sensor. There is an LED in between the two sensors that gives off red light when..... Listed under: Robotics – Automation Projects

571. AC Dimmer Circuit Overview Simple AC Dimmer circuit for incandescent bulbs. 128 levels of brightness. Parts are relatively cheap! How it Works This is an AC Chopping Circuit. The dim level sets where the AC waveform gets chopped on. More of the cycle makes the bulb brighter, less..... Listed under: Development Board – Kits Projects

572. The DIY Photobooth with Lighting Control using Arduino This is a tutorial on how to build your own Photobooth. My friend had a wedding coming up and was

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

573. Make a High-Altitude Balloon Tracker (Arduino) One of the coolest projects I have done so-far with my kids is a "near-space" balloon. That's not quite into space itself (100Km+) but so high that the sky looks black and you can start to see the curvature of the earth below you. The..... Listed under: Other Projects

574. Balancing Instructable Robot using arduino In this Instructable I wanted to show to you how to make a self balancing robot. What makes it unique is that its exterior is made to look like the Instructables Robot. Internally it works in the principle of PID, it is a very popular..... Listed under: Robotics – Automation Projects

575. Bidirectional Motor Control Using Arduino One of the simplest ways to get a motor to turn in both directions is by using a double-pole, double-throw (DPDT) relay. Along with the relay, this hookup requires two transistors and two Stamp pins, one for on/off control and the other for direction control..... Listed under: Motor Projects

576. Fab Lab Barcelona SuperNode Add an output device to a microcontroller board and program it to do something. Class syllabus:: http://academy.cba.mit.edu/classes/output_devices/index.html [what i learned /am learning] _ Relearned Arduino installation. _ Work with DC motors and H-Bridge IC with Arduino; and its general concepts. _ About the various Fab..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects

577. LED Matrix Bike Safety Backpack using arduino Biking around cars can be a frightening thing, and staying visible at night is crucial for your safety. This tutorial will teach you how to make a custom LED Matrix Backpack that is much larger and brighter than traditional rear bike lights. Parts You'll Need:..... Listed under: LED Projects

578. An FTIR Touchscreen Device The DJ Touch is a portable turntable touchscreen and interactive LED display. Our end goal was to produce a low cost touchscreen device, and demonstrate its application in a common consumer application. Out of an interest in electronic music, and with the knowledge of deejaying's..... Listed under: Sensor – Transducer – Detector Projects

579. Arduino Scouting Robot Summer Project: Arduino Scouting Robot [video id="P6PVLhjQ5FY" type="youtube"] Arduino Scouting Robot Part 1 * 12,9,5 volt power supply recharge it with a 12-volt charger keep power switch on to charge * 2 DC motors operate at 7.2V with a maximum current draw of 3 amps..... Listed under: Projects, Robotics – Automation Projects

580. Rubik's Cube Solver using arduino This robot that can solve a Rubik's cube using Arduino. I learned how to solve a Rubiks cube last year, and I was also into Arduino, so eventually I ended up with an idea to make my own Rubik's cube solver. Like many people searching..... Listed under: Robotics – Automation Projects

581. Connecting an IR Sensor Using Arduino Schematic Since the IR Sensor uses a light sensor, the schematic is very similar to that of the light sensor. The only difference is the addition of an IR LED and that the IR detector requires connection to 5V and ground. Breadboard Setup To setup..... Listed under: Sensor – Transducer – Detector Projects

582. Learn how to use 7-Segment LED Display using Arduino 7-Segment LED Display is a very useful component, but also a very confusing and difficult piece to use for beginners. It won't be difficult once you get it working for the first time. This is what you will get at the end of the tutorial (part..... Listed under: LED Projects, Projects

583. L293 Motor Driver and H-Bridges The most common method to drive DC motors in two directions under control of a computer is with an H-bridge motor driver. H-bridges can be built from scratch with bi-polar junction transistors (BJT) or with field effect transistors (FET), or can be purchased as an..... Listed under: Motor Projects

584. How to connect a servo to the Arduino Servo Cable The continuous rotation servos that come with the BOE Shield-Bot have a 3-wire cable for connecting it to the power and controller. The black wire is the ground, the red wire is the power (positive) and the white wire (sometimes yellow, depending on..... Listed under: Motor Projects

585. Conversational Gloves using arduino This is what came out of my attempt at combining some of my favorite tools and themes...Grasshopper, 3D printing, kinetic

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

586. Pneumatic Inverted Pendulum Construction Mechanical structure Compressed air comes from air compressor and goes in the proportional valve. Coming out from the proportional valve, there are two branches of air flow (one is compressor air, the other one is exhausted air) which connect to the air cylinder (pneumatic..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects

587. Arduino Robot With PS2 Controller (PlayStation 2 Joystick) In this tutorial, I'll show you how to use a wireless PlayStation 2 (PS2) controller and an Arduino Uno pilot a robotic tank. Story An Arduino Uno board was used at the core of this project. It receives commands from the wireless controller and sets..... Listed under: Robotics – Automation Project Ideas, Robotics – Automation Projects

588. Make your own TV ambilight using Arduino This is a very easy project. Here is the result I won't go into too much detail how each part works, because I have written some information on my blog. But you should be able to make it work with the information given on this..... Listed under: LED Projects

589. How to Build a Midbar ESP8266 Version A while ago, I made the ESP32 version of Midbar which later evolved into a multi-user Cipherbox. While developing the Cipherbox, I realized that even the Lite version of it might be too expensive and too redundant for some people, so I "resurrected" the single-user Midbar project and made an..... Listed under: Other Projects

590. Programming an ATTiny13A using Arduino & servo interpreter So there I was, browsing eBay, looking for some cheap deals on Atmel chips when i came across a pair of ATTiny13 chips for £2.50. I just had to have them! After all, how hard can it be? I needed a small chip to read..... Listed under: Arduino Programmer Projects, Interfacing(USB – RS232 – I2c -ISP) Projects, Motor Projects, Projects

591. Retablillo de las Maravillas v1.0 4./ Interactivity & electronics 4.1/ Switches / characters 4.2/ Screen / interface 4.3/ Motor controller 4.4/ I/O controller & interface [4./ electronics] [4.1/ switches / characters] The characters on top of the moving platform function, as interfaces, actually as on-off switches. While standing in its..... Listed under: Robotics – Automation Projects

592. How to control a Servo using Arduino In this one, servo is programmed to be controlled by two buttons, one turns servo to the left and the other one turns it to the right. When the servo is turning, corresponding LED will be switched on to indicate the operation. Result: Because Arduino..... Listed under: Motor Projects, Projects

593. IoT Using ESP8266-01 and Arduino Ever asked how to control any device from any place in the world? In this tutorial, we'll learn how to control things wirelessly over WiFi. Story Introduction Today, we will build a device that connects to the internet and allow the user to control his/her..... Listed under: Other Projects

594. Desktop Fist Bumper using arudino This simple device sits on your desk at work, ready to give you fist bumps throughout the day as you need them. A 3D printed "fist" is moved by a servo attached to a rack and pinion mechanism. An ultrasonic range finder detects when you..... Listed under: Battery Projects

595. Arduino Basic Wifi Project using ESP8266 wifi module Overview ESP8266 is a highly integrated chip designed for the needs of a new connected world. It offers a complete and self-contained Wi-Fi networking solution, allowing it to either host the application or to offload all Wi-Fi networking functions from another application processor. ESP8266..... Listed under: Internet – Ethernet – LAN Projects

596. $1.50 Arduino TV Annoyer Hey Arduino fans! Here is an 'ible for making a device that turns TVs on when you want them off, and off then you want them on! If you hide it in something inconspicuous, it would make a great April Fools joke or gag gift..... Listed under: Home Automation Projects, Projects

597. Making a Smart BLE Receiver for My Dumb Garage Door My garage door comes with a motor and a 433MHz remote that I don't always carry with me because it is quite bulky and in the way. Because of that, sometimes when I am in front of it and I want to open it, I..... Listed under: Other Projects

598. Katrina And Maya bOunce is a haptics-based learning game system that teaches the concepts behind wave dynamics, and in particular, resonance. The bOunce

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

599. Stereo Audio with an Arduino Recently I've been posting a lot of projects that use an 8 bit resistor ladder digital to analog converter(DAC) and an Arduino to make sound. (see the Arduino vocal effects box, the Arduino drum sampler, and my audio output tutorial). The technique I've been using to make these DACs is..... Listed under: Projects, Sound – Audio Projects

600. 3D Printed EMG Prosthetic Hand If you've ever looked at prices for prosthetic hand, you may have noticed that they can cost upwards of $5000, with more advanced myoelectric controlled arms priced at over $20,000. Such prices are not ideal considering that over 80 percent of amputees are from developing..... Listed under: Robotics – Automation Projects

601. Arduino All-In-One Remote Now you can have all the remotes of your house in a device that fits in your hand with Arduino, never fight for who has the TV remote again! To make it you will need: Arduino (I used a cheap copy of the arduino UNO)..... Listed under: Robotics – Automation Projects

602. Just Veggin with an Arduino Beetbox Bring Touch Control to the Arduino. Use interesting touch sensors like Carrots or Beets to make a "Beetbox". In this instructable you will learn: * How to use the Cap Sense library to make Arduino responsive to touch * How adding a Wave Shield (and..... Listed under: Projects, Sensor – Transducer – Detector Projects

603. MOTOR SWITCH LED Using Arduino Here is how to connect a motor, a switch and an LED to your Arduino and how to do some checking to make sure that everything works. The strategy is to get the circuit going in stages, testing each part as you go. Once everything..... Listed under: LED Projects, Motor Projects

604. How to Use the TM1637 Digit Display With Arduino In this tutorial, I am going to show you guys how to control the TM1637 4-Digit 7-Segment displays using an Arduino. If you want to displays sensor data, temperature and humidity, or want to design a clock, timer or counter, you will need this 4-Digit..... Listed under: Other Projects

605. Arduino Controlled Lighthouse Overview: I've often thought that a lighthouse would make a great project for an Arduino, and so I decided to give it a try using one of the local lighthouses here in Erie, Pennsylvania as inspiration. I chose the North Pierhead Lighthouse that guards the..... Listed under: LED Projects

606. Working with a Load Cell and an Arduino We built a system that uses eight air-clamping cylinders (McMaster-Carr 62185K64) to push down on a piece of glass to seal it to a sidewall. A number of times, the glass has cracked. So, this project is an attempt to come up with an inexpensive..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Project Ideas

607. LittleGoal: World Cup Match Notifier using Arduino [This Instructable was made at the Taipei Hackerspace littleBits Instructables Build Night.] Can't watch the World Cup football games, but want to know when important game events (ie. goals) happen? Then littleGoal is for you! The littleGoal setup will monitor the game's progress,..... Listed under: Game – Entertainment Projects

608. Arduino ESPWroom02 Breakout Board Hey, what's up, everyone? So here's something useful: a custom breakout board for using the ESPWROOM02U module for tinkering and testing. The ESP-WROOM-02U Breakout Board is an ESP8266EX-based microcontroller that offers the same features as its predecessor, the ESP Series, but is way smaller, making..... Listed under: Other Projects

609. Pololu Dual MC33926 Motor Driver Shield for Arduino This shield makes it easy to control two brushed DC motors with your Arduino or Arduino-compatible board. Its dual MC33926 motor drivers operate from 5 to 28 V and can deliver a continuous 3 A per motor. These great drivers also offer current-sense feedback and accept ultrasonic..... Listed under: Motor Projects

610. Stepper Motors Stepper motors are not smooth - they move in "steps". Different motors have a different number of steps to make one complete rotation. You use software to step the motor forward or backward at different speeds. There are two kinds of stepper motor bipolar and..... Listed under: Motor Projects

611. Capture the image of a falling object using Arduino The aim of this project is to create a setup to capture the image of a falling object or any object in motion at

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

612. LED Binary Clock using an Arduino A Binary Clock! I was recently looking at some binary clocks and I felt like Why not? I have everything to make one and I don't have a clock in my room. So I decided to build one and here it is. Hope you Like..... Listed under: Clock – Timer Projects, Projects

613. Wiring of the Solenoid Valves Overview of Wiring for the Salinity Sensor Other pages describing fish tank wiring: Connect electrical power to the pump and the breadboard Connect the salinity sensor to the breadboard and Arduino Connect the solenoids to the cascade control circuit (this page) Return to the main..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects

614. Cheap wireless transmission between two Arduinos with Infrared Hi all, For a project, I was looking for a cheap solution to send data from an Arduino to an other one. The serial port was already taken, and my transmission (unidirectional) needed to be wireless. My researches has brought me to discover these kinds..... Listed under: Internet – Ethernet – LAN Projects

615. Hack a TowerPro Micro Servo to Spin 360 / Continuous Rotation Hey guys! Since I've got my servos, I've had two that I set aside for hacking. So, coming to my favorite website for help, I was sorely disappointed when I couldn't seem to find any instructables on how to mod a micro servo. After viewing..... Listed under: Motor Projects

616. IR DOMED LEDS DELIVER UP TO 5.0A PULSED RADIANT POWER OVER 50° Lumileds has added news LEDs to its Luxeon IR Domed Line with a significant increase in both DC and pulse drive current–up to 1.5A and 5.0A, respectively. The new emitters deliver radiant power of 1350mW at 850nm wavelength (slightly visible) or 1450mW at 940nm (invisible..... Listed under: LED Projects

617. RGB LED Tutorial (using an Arduino) (RGBL) using arduino LEDs are great. But with any project there comes a point where flashing is simply not enough. For these cases an RGB (Red, Green, BLue) LED is the answer. With an RGB LED you'll be able to produce any colour glow your heart desires. At..... Listed under: LED Projects

618. Darkness Map Data Collection Device The Darkness Map encompasses both data collection and visualization of nighttime light levels. You can add to the map by downloading the app for iPhone or Android, but you can also contribute data by creating your own data collection device. This tutorial will cover how..... Listed under: Sensor – Transducer – Detector Projects

619. Say Hello with My Roommate Mouse with Arduino I live alone in a small house in Shenzhen, and i really I love this graceful and dynamic city. As an software engineer, I have no girlfriend yet, and usually nobody visit my room, I really love this because I do not need to clear..... Listed under: Game – Entertainment Project Ideas

620. Arduino-based line follower robot using Pololu QTR-8RC line sensor UPDATE FEB 2012: This guide is featured on Adafruit's blog http://www.adafruit.com/blog/2012/02/14/arduino-based-line-follower-robot/ This is Faz3a II, my first line-following robot, which I also hope to use for maze-solving. I used the Arduino Uno, Adafruit motor shield, Pololu's QTR-8RC line sensors and motors. You can build a..... Listed under: Projects, Robotics – Automation Projects, Sensor – Transducer – Detector Projects

621. RGB LED Rainbow Fader using an Arduino Introducing the RainBoard: A simple RGB LED Rainbow fader using an Arduino Uno and a few simple components. Believe it or not, we will control 45-channels of RGB LEDs at 32 brightness levels using only 3 digital pins from the Arduino! How is this possible..... Listed under: Game – Entertainment Projects, Home Automation Projects, Projects

622. Window Painting Robot (arduino, processing, accelerometer) The idea for this project came from one of my favorite 'ibles: the polargraph. I loved the drawing style and thought how cool would it be to do this on the side of a building? Unfortunately the challenges to setting up such a large polargraph..... Listed under: Home Automation Projects, Robotics – Automation Projects

623. Kaleiduino: A Battery Powered Arduino LED Kaleidoscope Hello everyone, and welcome to my Instructable! This instructable will show you how I made the first ever DIY Arduino controlled "LED Kaleidoscope"! What is an LED kaleidoscope? Well, our traditional kaleidoscopes used 3 mirrors joined as a triangle with stuff like sequins and stolen..... Listed under: Battery Projects, LED Projects

624. Using The PCF8575 i2c i/o Expander To Read Inputs With Arduino This Instructable will show you just how easy it is to add extra inputs to your Arduino. You can

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

625. Arduino Robotic Spider V8 I needed a project that would use all my servos, so I decided to make the do-nothing, worthless spider. If you have fischertechnik and servos to waste, this is the project for you! Really, this flopping spider makes for a great learning project. The main…... Listed under: Robotics – Automation Projects

626. Arduino controls cheap RC car transmitter OBJECTIVE Cheap Chinese RC toy cars can be had for about 5 Euros in the local market. The wireless brains behind the majority of these cheap RC toys is a pair of very cheap ICs the TX2 and the RX2. Yup, that's what they are called. So this…... Listed under: Car Projects, Projects, Radio Projects

627. Arduino Ping Ultrasonic Range Finder Code The Ping))) is an ultrasonic range finder from Parallax. It detects the distance of the closest object in front of the sensor (from 2 cm up to 3m). It works by sending out a burst of ultrasound and listening for the echo when it bounces…... Listed under: Projects, Sensor – Transducer – Detector Projects

628. How to Make an Interactive Sound Wave Print In this tutorial we are going to show you how to make an interactive sound wave print within a picture frame, so you can see and hear your favourite song at the same time! When you touch the print through the glass of the frame,…... Listed under: Sound – Audio Projects

629. Piano for Campus School Project With Arduino Nano RP2040 + MPR121 Hi! My name's Jack and I'm a senior at Boston College studying Computer Science and Finance. This semester, I'm taking Physical Computing with Professor Gallaugher. We've been following a flipped classroom model and I made this project utilizing Professor Gallaugher's Circuit Python YouTube tutorials. For my…... Listed under: Other Projects

630. Arduino based Bi-color LED Matrix Audio Spectrum Visualizer After we came up with the Bi-color LED Matrix Driver Module kit, we have been looking around for interesting projects to work with it. You may be interested in some of the projects we have put up at instructables using this LED Matrix kit. Instructable…... Listed under: LED Projects, Sound – Audio Projects

631. Digital Dice With Arduino Have you ever tried to play a game only to find out you don't have any dice? That's not a problem anymore! Now you can create your very own digital dice using LEDs and your Arduino board. This is a beginner-level project. This project will…... Listed under: Other Projects

632. Magic Light Capacitance Sensor using an Arduino This was my very first arduino project. Its great for beginners. Fade the color or the lights my moving your hands near it. It fades from a pretty purple blue to a firey red-orange. Its was SUPER easy to build, not to hard to write…... Listed under: LED Projects, Projects, Sensor – Transducer – Detector Projects

633. LED Flipbookit: full color and brightness control with an Arduino Step 1: Gather the materials Materials: - addressable RGB LED strip : I used a new variety of three conductor WS2811 strips. - an Arduino : I used a Arduino Leonardo. Any 5vdc Arduino should be adequate. - 4 AA batteries and a battery holder…... Listed under: LED Projects

634. Arduino – Solar MPPT Battery & Phone Charger I always wanted to make a PCB and this is my first professional circuit board attempt. So before you decide to start this project you should know there could be some mistakes or it could be more reliable and compact. This design is not the…... Listed under: Solar energy projects

635. Infinity Mirror Clock using Arduino Ever since my addressable RGB LED strips (WS2812B) came from Aliexpress, I've been fascinated with LED projects. Following up on my success with my Charlieplexed LED clock, I wanted to create something with more Jazz.. While browsing google images, I came across an instructable for…... Listed under: Clock – Timer Projects

636. Experimenters Guide for Arduino as Performed at OIT Resources Adafruit ARDX - v1.3 Experimentation Kit for Arduino Experimenters Guide for Arduino (PDF) Bread Board Layouts (PDF) Arduino Tutorial Bundle (Instructable) This Arduino Tutorial is going to be very similar to the Arduino Tutorial Bundle Instructable but because we are working on this in…... Listed under: Other Projects, Projects

637. Calming Book Box (Arduino) In moments of hypo- or hyperarousal, when the thinking brain is offline, this Arduino-based Calming Book Box will prompt self-

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

638. ZAPpelin, or how to train your blimp with an Arduino and IR remote Is it flying seal? A flapping alien? No it's a ZAPpelin, an Arduino controlled indoor blimp, setup to learn in the signals from an IR remote to command it. This project came to life at the third Arduino Jam Februari 15th to17th 2013, at Timelab,..... Listed under: Game – Entertainment Projects, Radio Projects

639. Digital Zoetrope using Arduino A zoetrope is a mechanical device that animates a series of pictures by spinning them fast enough that the images appear to merge together and move, My digital zoetrope works on a similar principal, by flashing the LEDs while they are spinning it is possible..... Listed under: Video – Camera – Imaging Projects

640. Origami Interactive Kinetic Art Kinetic Interactive Arts? These concept of moving arts and interacting arts are not new to you, but most of the interesting and massive size pieces are almost always located in private companies or corporations. I was inspired by the piece "Diffusion Choir" located in a tech..... Listed under: Other Projects

641. The machine of answers Using Arduino Should you ask your boss for a raise? Call that cute guy you met at a party? Sell your stock? Wouldn't it be nice to have a handy method of handling some of life's more pressing dilemmas? This machine give you the answer to all..... Listed under: How To – DIY – Projects

642. ABC 123 Toddler Trainer using Arduino Here is a kid tested and teacher approved trainer for the kids in your family and / or extended family that are learning their ABCs and their 123s. It was kid tested on my granddaughter, who really loves it, and was approved by my wife,..... Listed under: Home Automation Projects

643. DIY Fingerprint Lock Box Ever wanted a box that opens in a super cool way? We thought it would be fun to create a box that can be unlocked using the correct fingerprint! If we had more time, we would make the box more secure. In the mean time,..... Listed under: Other Projects

644. Audio and Visual Timer Do you need a way to quickly and easily set a timer for short intervals? This audio and visual timer has you covered! All you need to do to set your timer is turn the potentiometer knob and push the button. One LED = 5..... Listed under: Other Projects

645. Nanoleaf 2.0 So this is the Nanoleaf 2.0 which is a DIY version of the famous Nanoleaf RGB Triangular lighting setup. The goal here was to Recreate a Nanoleaf-like device with minimal spec and low cost, one that has all the basic RGB Glowing features and can..... Listed under: Other Projects

646. The Arduino AA Undershield I recently bought an Arduino Diecimila board. It's awesome and the applications, you can use it for or with is almost unlimited. However there's a problem when you want to use it in portable applications. You can use the Liquidware lithium backpack, which is a..... Listed under: Development Board – Kits Projects, Projects

647. BLE Indoor/Outdoor Weather Station This indoor/outdoor Weather Station is the third in a series of Very Low Power BLE - 2022 projects. The very low power BLE temperature, relative humidity and barometric pressure sensor is an extension of the Very Simple, Very Low Power BLE Temperature Sensor The sensors..... Listed under: Temperature Measurement Projects

648. DIY Fitness Tracker(GET-FIT) Introducing GetFit, your ultimate health and workout partner. GetFit is an easy-to-use, teachable fitness tracker with the capability of detecting an endless variety of exercises. Powered by Arduino Nano 33 BLE Sense and Edge Impulse, it is a completely open-source project. Features Can Count unlimited..... Listed under: Other Projects

649. Bluetooth RGB Shelf Lighting using Arduino Being the giant fan of LED's that I am i'm always trying to come up with new ways I can put them throughout my house. Today i'm going to show you how to create a simple, yet extremely eye catching, RGB Bluetooth controlled Shelf lighting..... Listed under: Home Automation Projects, LED Projects

650. Arduino Science Clock I have toyed with the idea of building a clock for sometime and my sister had a big birthday coming up so I decided that this was a great

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

651. L.O.G. $10 Arduino There are probably thousands of articles on making an Arduino. So who needs another Arduino? Well, this Lazy Old Geek(L.O.G.) needs one. Here's the features I would like: Features: Low cost More permanent than a breadboard Not a custom PCB More prototyping area than a..... Listed under: Arduino Programmer Projects, Projects

652. Love Gauge Using Arduino I'm working together with my wife. But sometimes one of us has an external appointment. So, if one of us is thinking about the other, we want to show it together. For this, I have made an Love Gauge for us. It stands on our..... Listed under: Other Projects

653. ITTT || ARDUINO-UNO || ANTIPONG CONSOLE This project and instructable were made as part of an assignment at HKU (University of the Arts Utrecht), during the module: If This Then That. In this instructable we'll be making a small game console that plays an inverted version of pong. In..... Listed under: Game – Entertainment Projects

654. Emotidora: Hats with Emotions using Arduino This project, Emotidora, will help a user express his/her emotions about events in day-to-day life. Weve all been in situations where something very exciting or unfortunate has happened to us and we want to share it with other people. This usually involves the expression of..... Listed under: Game – Entertainment Projects, Home Automation Projects, Projects

655. Pseudo Perpetual Spinning Top You must have seen many magic tricks and wondered how it works so, here's another one but you don't have to figure out how it works. I will show how it works (Spoiler - It uses magnets and some electronics) and how you can make..... Listed under: Other Projects

656. WAVEbuoy using Arduino The WAVEbuoy is a arduino lamp connected to the internet that displays the current wave height of any of the National Data Buoy Centre's wave buoys. This lamp is currently connected to the Sevenstones Lightship buoy that gives an indication of swell approaching Cornwall in..... Listed under: Home Automation Projects

657. Arduino Keyboard and Mouse Control Code This example illustrates the use of the Mouse and keyboard libraries together. Five momentary switches act as directional buttons for your cursor. When a button is pressed, the cursor on your screen will move, and a keypress will be sent to the computer. Once you..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects, Projects

658. Remote Controlled Car Using Cardboard Every maker at least once make or tries to make RC Car. RC Cars are widely available yet the joy of playing with the one you made yourself can't be compared with the bought one. So I decided to make a Wireless RC Car with..... Listed under: Car Projects

659. Arduino ADK LED Lighting Have you ever wanted to control electronics with your smartphone? The Arduino ADK (Android Development Kit) is the Arduino Mega with a built in USB host device, ready for your smartphone to be plugged in! We'll make a simple introductory project with a few LED..... Listed under: LED Projects, Projects

660. Marblevator, Perpetual?, Cradle. "Marblevator, Pertual?, Cradle" like "Marblevator, Perpetual?, Version 2" and "Marblevator, Perpetual?" is not perpetual at all as it is simply another illusion. And like its predecessors it is a very quiet illusion with the only noise being that of the marble as it rolls back..... Listed under: Other Projects

661. Arduino Based Temp and Humidity Display The temperature in my office at work varies quite a bit depending on the time of day, season, and the whims of the other people I share the floor with. When I'm sitting at my desk shaking uncontrollably or sweating profusely it would be nice..... Listed under: Temperature Measurement Project Ideas

662. Pixel Drop Ceiling using Arduino In our living room we have a small patch of drop ceiling right in the middle of the room, basically a giant piece of duct tape to cover up bad carpentry. It was constantly getting water damage from what looks like a giant hole in..... Listed under: Home Automation Projects

663. Audio Visualizer With an LCD Display People love listening to music. It is as they say, music reflects our mood. And it is a spectacle to see music become 'alive'

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

664. Push-button using an Arduino Pushbuttons or switches connect two points in a circuit when you press them. This example turns on the built-in LED on pin 13 when you press the button. image developed using Fritzing. For more circuit examples, see the Fritzing project page Connect three wires to the Arduino..... Listed under: How To – DIY – Projects, Projects

665. Soft Squares – Chisel Away With Arduino in Unity For this project, I created an Arduino-powered chisel which can communicate with a game I made in Unity, Soft Squares. You can paint over a 5 x 5 x 5 cube and chip away cubes you don't need, to create a miniature sculpture of whatever..... Listed under: Game – Entertainment Projects

666. Create an internet controlled robot using Livebots Here you will learn how to create an internet controlled robot or other installation using Livebots. Livebots is a project I'm working on which consists of an easy to use website for all the robots that people can interact with through the internet. As an example I..... Listed under: Robotics – Automation Projects

667. The "Rare Vogel" Birdhouse Controller A birdhouse controller for a bird based game, why? I saw this birdhouse in the store and felt instantly inspired! Going from something big and grand with a shortage of time for the school's deadline to something small and cute. It inspired an entire game..... Listed under: Game – Entertainment Projects

668. Using the Arduino Uno to program ATTINY84-20PU Using the Arduino Uno to program ATTINY84-20PU (Newark item # 68T3783). This Instructable shows how to use the Arduino platform to work with physically smaller processors, such as the ATtiny84 (84/44/24), ATtiny85 (85/45/25), and ATtiny2313. This example is specifically for the ATtiny84-20PU processor (Newark item..... Listed under: Arduino Programmer Projects, Projects

669. 3D Printed Timelapse/3D Scanning Turntable An affordable Arduino Turntable designed for Time lapse photography. Changing the gearing and code it can also be used for Photogrammetry/3D scanning or Video. The turntable operates on the move shoot move principle in the Timelapse and Photogrammetry modes where the camera is triggered via..... Listed under: Other Projects

670. Home Made Bezel / Window for LCD, LED, TFT Displays. I've been working on a project that used a 16x2 LCD display and wanted a nice finish that also allowed me to seal against water and other liquids. I also needed impact resistance, low cost and the ability to be changed easily if worn or..... Listed under: LCD Projects, LED Projects

671. MaKey MaKey Monome using Arduino Objective: build a monome - a complex electronic music instrument - using easy-to-learn, inexpensive components and a process that's so easy a kid could do it. Gist: This touchscreen music instrument is essentially 4 parts: MaKey MaKey (or Arduino) Neopixels copper tape cardboard Sound is..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects, Sound – Audio Project Ideas

672. Custom NanoLeaf Lights! DIY, Wireless, Modular, Arduino, 3D Printed! I am very excited to share this project with you because it looks absolutely beautiful and is super easy to make! It's a NanoLeaf inspired wireless Arduino RGB LED lights project that not only allows you to create any custom NanoLeaf shape you want but..... Listed under: Wireless Projects

673. Arduino and Xbee wireless setup The Arduino Wireless shield allows your Arduino board to communicate wirelessly using Zigbee. This documentation describes the use of the shield with the XBee 802.15.4 module (sometimes called "Series 1" to distinguish them from the Series 2 modules, although "Series 1" doesn't appear in the official name..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects, Projects

674. Arduino or Twitter Mets Apple Whenever I go to Citi Field with my kids to see the Mets, they go crazy for the Home Run Apple.To me, the Apple is part of what makes baseball exciting for kids. Even though my kids may not watch most of the games, I..... Listed under: Internet – Ethernet – LAN Projects

675. Starship X582 Incursion Starfighter Childrens Interactive Bed Now forgive my memory, as this was a few years back now. What started out as a children's spaceship themed bed, turned into an epic build. Supplies The project started with the purchase of a single mattress. I then walked around the local DIY store..... Listed under: Other Projects

676. Control Fluorescent Lights with a Laser Pointer and an Arduino A few members of the Alpha One Labs Hackerspace do not like the harsh light given out by

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

677. LED Patterns Using Arduino A LED chain with multiple patterns. Control Nine LED bulbs to form different patterns using Arduino UNO. Working Video at Google Drive Link. Supplies Arduino UnoBread BoardJumper WiresLED 5mm 5V (Any Color) 9pcsResistance 220 ΩA Working PC Step 1: Placing the LED Bulbs Place all the..... Listed under: LED Projects

678. How to make your own Arduino board If your are like me which I am guessing you are, then ever since you got into doing stuff with arduino you have wanted to make your own arduino board. You may be surprised to find out that making the prototyping board is actually very..... Listed under: Development Board – Kits Projects, How To – DIY – Projects, Projects

679. HydroBuddy HydroBuddy is a hydration-promoting device, designed for people who spend most of their day in one place (such as behind a desktop) and tend to forget about hydrating themselves. Once set up, it passively tracks how much water you drink, gently reminding you to drink up..... Listed under: Other Projects

680. Polydexter: Arduino Robotic Translation Arm Polydexter was the introductory project in the Creative Architecture Machines (CAM) advanced options architecture studio at the California College of the Arts (CCA), taught by Jason Kelly Johnson (co-founder of Future Cities Lab) and Michael Shiloh. Parts developed for this robot would go on to..... Listed under: Robotics – Automation Projects

681. Boot Bot Arduino Bootload Shield The Boot Bot Shield lets you burn the arduino boootloader onto a blank Atmega 328 chip. The bootloader is that magic piece of software that turns a mundane chip into the open source programmable miracle known as the arduino. Blank chips cost a few dollars..... Listed under: Projects, Robotics – Automation Projects

682. How to Build a Simple DIY Home Automation System Home automation is a term used to describe the process of automating certain tasks and devices around the home. This can include tasks such as turning on the lights when you enter a room, or setting the thermostat to a certain temperature. Home automation systems..... Listed under: Home Automation Projects

683. Arduino Power outlet with exposed pins I found my self often trying to plug stuff at home with Arduino. So I thought it would be good to have a system that you can just plug your sensor, plug the appliance and code something to see how it goes. I never liked..... Listed under: Home Automation Projects, Sensor – Transducer – Detector Projects

684. Arduino Orb Build Warden An Arduino based Ambient Orb designed explicitly for monitoring Source Code Autobuild systems. This orb can easy be repurposed for monitoring really anything that can have alerts from time to time. Step 1: Purpose Some time ago a co-worker passed me an article about "Extreme..... Listed under: Other Projects, Projects

685. The Look-o-box Intro Dit is een Arduino project die ik heb gemaakt voor een schoolopdracht, in deze documentatie zal ik instructies geven over hoe je dit zelf ook kan maken en wat je ervoor nodig hebt. Ook leg ik hierin vast het concept, iteraties en een korte..... Listed under: Other Projects

686. Spinning Tardis with blinking LED (Powered by littleBits) using Arduino Construct a Tardis that spins and blinks! Total Build Time: 30 mins · Coding: 5 mins · Construction of the Tardis: 20 mins · littleBits LED and motor assembly: 5 mins Tardis.wmv(320x240) 10 KB Step 1: Gather all needed parts. LittleBits: · (2) Wires ·..... Listed under: LED Projects

687. Race Lights Reaction Timer This project is a small game you can play with another player. You can time your reaction speed and compete with your friend. The game is inspired by the start lights of a formula 1 race. Earlier Iterations: The images above are of earlier iterations..... Listed under: Clock – Timer Projects

688. Cyber Tail About 25 million years ago, our ancestors lost their tails during the evolution to better adapt to the the environment. Today, as we live in the digital age, our bodies are evolving along with the cyber world. What would a cybernetic tail bring to our..... Listed under: Other Projects

689. 4x4x4 RGB LED Cube using Arduino A while ago, when I first started using Arduino, my first project was a 4x4x4 LED cube, I built it from a Guide I found here in

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

690. Make Voice Call using Arduino This sketch connects a voice call from your GSM shield and Arduino to a remote phone number entered through the serial monitor. You'll need to attach a speaker and microphone to hear the connected phone and send your voice. First, import the GSM library..... Listed under: Phone Projects, Projects, Sound – Audio Projects

691. SjoelSim! SjoelSim! Is a mixed-reality version of the popular and historic Dutch shuffleboard game "Sjoelen". The circuit makes use of two HC-SR04 ultrasonic distance sensors to measure the X and Z velocity of a playing disc. In combination with a program built in the Unity Engine,..... Listed under: LED Projects

692. Arduino Peak Power Tracker Solar Charger This project is an update of my original Peak Power Tracker Battery Charger Project. It is designed to control a 12V solar panel charging a 12V lead acid battery. The updated version of this project uses the Arduino Duemilanove development board (from www.sparkfun.com) as the..... Listed under: Battery Projects, Projects

693. Super Long (7') Lightsaber There are so many authentic looking lightsaber build guides but not many on building a super long lightsaber. Regarding Star Wars, I'm not sure why lightsabers are normal sword size anyway. Its not like the longer the lightsaber, the harder it would be to swing..... Listed under: LED Projects

694. Ping Organ using an Arduino I was trying to think of a quick toy I could build for my kids. I came up with this idea of an ultrasonic range finder, an Arduino, and a speaker. Basically the Arduino plays a tone out of the speaker based on the distance..... Listed under: Game – Entertainment Projects, Projects

695. Hydrate Reminder An interactive coaster that reminds you to drink water. I myself find it hard to reach the daily water intake. I can go on without water for hours when sitting behind my desk. For this purpose alsone, I created a coaster that reminds me to..... Listed under: Other Projects

696. Papercraft Automata Race Game littleBits Circuit using Arduino This instructable will show you how to create a game using littleBits. The game will start with a sound trigger. Each player will have to press a button repeatedly. The first person to press their button 25 times wins. A buzzer will sound to end..... Listed under: Game – Entertainment Projects

697. Joystick Controlled Car I have created a joystick-controlled car, capable of moving left, right, forwards, and backwards. I created this as I thought it would be a challenging project with a fun and exciting purpose. Supplies Arduino Uno R3L293D Motor Control2x DC MotorServo Motor2x 9v Battery (or 1..... Listed under: Car Projects

698. Game Controllers using Arduino This instructable will teach you how to construct homemade game controllers for personal games, education aids, or anything you want. This system uses 4 controllers which send signals to a central hub which holds an Arduino. It was designed for use with a game called..... Listed under: Game – Entertainment Project Ideas, Ideas

699. Arduino decision box (Attiny85) So I was a bit bored this weekend (actually I wrote this some months ago) and since I had ordered a bunch of Attiny85 chips the week after I decided to make a quite random project with them. This is a decision box, it takes..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects

700. RGB LED with Arduino 101 To Learn about the basic LED usage practice, read here. What is a RGB LED? With an RGB (Red Green Blue) LED you'll be able to produce any colour that is flashing everyone's eyes. At first glance, RGB LEDs look just like regular LEDs, however, inside the usual..... Listed under: LED Projects, Projects

701. How to Make a Garage Door (EASY!!!) This is a EASY arduino project that you could create to impress your teacher and friends. This project is an IR sensor-controlled garage door. It uses 2 Servo motor's to move the garage door into an opened and closed orentation. The inferred sensor (IR) is effective and..... Listed under: Other Projects

702. Cthulhu Party Lamp/Accessory Using NeoPixels and ESP32 But was I really? Something was missing... It'd been a while since I last went to a festival. Y'know, that

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

703. Apollo 11 Arduino Clock Project and Instructable write-up done by Ian Lacy on behalf of the MIT Edgerton Center. In this project, I'll show you how to build an Apollo 11 clock. The clock has each hour associated with a leg of the mission, and plays an associated audio clip..... Listed under: Clock – Timer Projects

704. How to use the IR library with an attiny using Arduino This Instructable will tell you how to use the IR (infrared) library on an Attiny. I will be using an Attiny85 with an Arduino Uno. I won't cover how to upload sketches to the Attiny just how to use the IR library with it. the..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Project Ideas

705. LED Pattern Hat using an Arduino This is a (moderately) simple Arduino project that is a spectacular display from LEDs - that you can wear on your head! It also uses a program that is not intricate at all, so you can modify it for different patterns and cycles. It's also..... Listed under: Game – Entertainment Projects, Projects

706. NRF24L01 Tutorial – Arduino Wireless Communication In my last tutorial I created a NodeMCU based Duino Coin Miner. It is an awesome little miner that sits on my desk and mines few cents a day. However, adding these miners to my home network choked my WiFi router. Home Appliances and Smart..... Listed under: Wireless Projects

707. DIY Android Home Automation Box Here's a little show and tell of my Android controlled home automation box. It's a small extension box that's controlled by an Android smartphone. You can turn the individual outlets on by tapping a button from the app or use the speech recognition app, found..... Listed under: Arduino Android, Home Automation Projects

708. Build a Car With Touch Sensitive Steering for Your Rat In 2019 Professor of Behavioral Neuroscience Kelly Lambert and her research colleagues published a journal article called "Enriched Environment Exposure Accelerates Rodent Driving Skills." This article explains "The research team built a tiny car for the rats out of a clear plastic food container on wheels, with..... Listed under: Car Projects

709. Use foot switch to open Linux terminal using an Arduino So here is how i made my foot pedal used to start Linux terminal using an Arduino. It's made because I am board of pressing the terminal icon with my mouse. P.S. Sorry for my English. I am from Croatia. Tools needed: - Soldering iron and..... Listed under: Projects, RTOS – OS Projects

710. Crius ROT8 MIDI Controller [ABLETON READY – Auto Mapping] Rev1.1 The last couple of years I started learning about electronics from nothing to be able to build my own MIDI controllers that would serve my needs , taste and be cheaper overall in comparison with the branded products.This is CRIUS ROT8 MIDI CONTROLLER that consists..... Listed under: LCD Projects

711. Musical Table using Arduino The Musical Table is a toy table that allows kids to play musical phrases by moving toys around the surface. Each of seven switches can play different musical phrases in four bases, making 27 different musical phrases in total. Some of the phrases are..... Listed under: Home Automation Projects, Projects, Sound – Audio Projects

712. ARDUINO WIRELESS HOME SECURITY SYSTEM In this project I will discuss how you can make a cheap wireless home security system.Though during starting of this project the main objective was only for security alarm but later I found this device can be used to solve several problems.These are the few..... Listed under: Home Automation Projects, Security – Safety Projects

713. Sony PS-X75 Record Player Fixed With Embrio and Arduino Mega2560 Fixed a SONY PS-X75 Record Player (1980's) with a blown MB8841-209L microchip. Fixed it with a Arduino Mega2560 Board and the fabulous Embrio Software. https://youtu.be/31ILr8oTtt4 A long, long time ago in 1980's Sony produced one of the best automatic record players the Sony PS-X75. The..... Listed under: Other Projects

714. Assembling the ZIFduino USB 1.2 The ZIFduino, for all intents and purposes, is an Arduino with a ZIF socket. It's geared toward those that want to do prototyping on the platform, but then move the ATMega chip to a stand-alone environment. The pin layouts are exactly the same, so it..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects, Projects

715. Space Invaders Mini Arcade With CRT I have built this Mini Cardboard Arcade using a B&W small CRT (Cathodic Ray Tube) recovered from an old video

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

716. Robot Arm Set using Arduino I made use of Smart Tank Chassis in the past 4 projects and I wanna do something very different. After searching in google and consider different stuffs for a couple of days, I found the Robot Arm Set. It looks awesome! It provides servos, servo..... Listed under: Robotics – Automation Project Ideas

717. Using Servo Motors with Arduino In this instructable, I am going to show you what a servo motor is, how to use it, and ideas for starting projects using it. I used arduino to control my servo, I added how to use a 555 in some of the later steps..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects, Motor Projects, Projects

718. Crius OctaPot Midi Controller I am Crius and I LOVE MIDI Controllers! The last couple of years I started learning about electronics from nothing to be able to build my own MIDI controllers that would serve my needs , taste and be cheaper overall in comparison with the branded..... Listed under: Other Projects

719. How to build a whole home energy monitor using Arduino This page and linked pages detailed below document how to build whole house energy monitor that has a display for easy, quick access to current energy use information, usb datalogging for detailed long term data storage and Internet connectivity for online graphing. First a quick..... Listed under: Home Automation Projects, How To – DIY – Projects, Metering – Instrument Projects, Projects

720. Pacman/Ghost LED Matrix We created a LED matrix that shows a Pacman and a Ghost. The figure changes by pressing a button. Also, the ghost takes the color according to the external temperature. It means, if it is cold, the figure turn blue, but if it is warm..... Listed under: Blog, LED Projects

721. Internet-Controlled RC Car using Arduino The Internet Controlled RC Car allows you to remotely drive around a small rc car from wherever you may be and see where it is going. This is fun because you can remote explore whatever space you leave it in, or hand over the keys..... Listed under: Car Projects, Game – Entertainment Projects, Internet – Ethernet – LAN Projects

722. Honey I Shrunk the Remotes! A disclaimer right up front, I didn't shrink the remotes and that's not a photo of my remotes through a microscope. But what I did do was shrink them down to the buttons I use the most. Not even sure what most of the others..... Listed under: LCD Projects

723. Arudino- No Blinky So you just bought this Arduino kit or Arduino-clone kit. You spent hours inserting parts and soldering components. You connect everything up and turn it on and stare at the little LED. You wait a second and nothing happens. You wait a minute and still..... Listed under: Development Board – Kits Projects, Projects

724. Arduino Seismic Activity Monitor – Ethernet Shield Have you ever wanted to impress your friends by saying something crazy like, "I think there's going to be an earthquake soon" moments before an earthquake hits? Or do you just want some warning, a few seconds that could save your life. This project will..... Listed under: Internet – Ethernet – LAN Projects, Metering – Instrument Projects, Projects

725. Hacking a Sonoff Touch Panel to Work With MQTT and Homeassistant There are some great hackable devices in the SONOFF range such as the original SONOFF switches, the Slampher and the SONOFF Luxury wall plate which is the subject of this instructable. These devices are based around the ESP8266 or ESP8285 WifFi modules and are easily..... Listed under: Home Automation Projects

726. IoT: Weather Box (with Custom Alarms & Timers) Please vote for me in the contests i have entered. Hope you enjoy the instructable, and happy making. I was, some time ago, quite interested in IoT projects and so I thought it would be fun to make something associated with the Internet. I recently..... Listed under: Clock – Timer Projects

727. Arduino Traffic Light Controller with Remote Control I had a traffic light that I was refinishing. The only thing left to do was to build the controller for the light's signal patterns. To give it a twist I incorporated a remote control. This was also the perfect opportunity for me to try..... Listed under: Car Projects, Projects, Radio Projects

728. Light-Up Disco Table using Arduino Every apartment needs awesome furniture, so why not make your own? This coffee table contains LED strips that light up

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

729. How to Make a Rechargeable Mini Lightning Cloud https://youtu.be/GrlXwePOK0Q Do you want to build a rechargeable mini lightning could? Follow this tutorial, you'll be taught how to make one! Step 1: https://youtu.be/GrlXwePOK0Q Material List Blazing WS2812 LEDstrip Pegboard DFP layer Mini player module Hot glue gun & glue stick Trumpet Cotton High frequency..... Listed under: Other Projects

730. DIY Arduino FM Radio (Part 2) If you have read my first blog on the topic, than you already know what I'm experimenting with. Low price FM Radio, build with TDA7088 / YD 9088. It was obvious, that technology from the early 90-x is outdated. I mean, simple "search and hold" function of..... Listed under: Projects, Radio Projects

731. Theremin Toy using Arduino I wanted to make a little toy for my granddaughter to play with when she visits. I know like most kids, she enjoys things that make sounds and have different colored lights on them and if she does something, the toy does something. I thought..... Listed under: Game – Entertainment Projects

732. BT Based Voice\ Remote Controlled Car Using TIVA MC This is a Tiva microcontroller based project. As there is a fewer data regarding projects based on Tiva, I as an individual am taking this initiative. I hope the readers will encourage it. The project named as bluetooth based voice controlled and remote controlled car..... Listed under: Car Projects

733. Barcode Based Complete Security and Enrollment System Using Tiva This is Tahir Ul Haq, bringing you another exciting and innovative Tiva Micro-controller based project. This is the third instructables in the Series. Hope you will like it. This time it is Bar-code Based Complete Security and Enrollment System. The project focuses on a bar-code..... Listed under: Security – Safety Projects

734. Using Servos with Arduino made easy ! Servomotors or simply servos are essential components of a robot which convert electrical energy into mechanical energy.They are widely used in the field of RC hobby and robotics. But unlike simple geared motors , these servos are made by integrating a geared motor with a..... Listed under: Motor Projects

735. CC3D Flight Controller Firmware Changing Introduction: The CC3D is a powerful and affordable flight controller that is very popular to use mainly on mini quad copters due to its small form factor. It has many advanced features that you can use if you add a GPS module, even way point..... Listed under: Other Projects

736. Interactive IOT Stuffed Animal For my first project with Particles's Spark Core, I decided to make an internet-connected stuffed animal! After close consideration, I settled upon a blue and green alien to be the body of this project (see the above picture.) Powered by a Spark Core, this other-worldly..... Listed under: Other Projects

737. Face detection and tracking with Arduino and OpenCV UPDATES Feb 20, 2013: In response to a question by student Hala Abuhasna if you wish to use the .NET Serial class, use the naming convention "\\\\.\\COMn" and replace n with a number > 9 to define your com port for COM ports above 9..... Listed under: Internet – Ethernet – LAN Projects, Projects, Sensor – Transducer – Detector Projects

738. Reaction Speed Timer Many, many years ago – when I was young - I visited the Evoluon in Eindhoven, The Netherlands. At that time it had all kind of technical stuff you could see and you could play with. Nowadays it does no longer exists in that form..... Listed under: Clock – Timer Projects

739. Hacking a Sonoff to Work With Home-Assistant and MQTT OK So my third Instructable and here we're dealing with another Sonoff device, the original Sonoff WiFi smart switch. Theses devices are again based around the ESP8266 and are easily hacked. The devices can switch up to 10A @ 240V so are ideal for switching..... Listed under: Home Automation Projects

740. Under $8 Arduino Serial Data Logger – Record to SD Card Disclosure: This project operates the ATmega328-P-PU outside the published ATmel specifications: According to ATmel, the 328P requires slightly over 3.3V to reliably start the oscillator at 16MHz and to otherwise perform acceptably. Lab testing here at SofKinetics has shown that the 'board-duino' 328P-PU can withstand..... Listed under: Memory – Storage Projects, Projects

741. DIY Solar Tracker using Arduino Introduction We aim to introduce young students to engineering and teach them about solar energy; by having them build a

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

742. Build a Tank Volume Reader in Under $30 Using ESP32 The Internet of Things has brought a lot of formerly complex device applications into the homes of many craft brewers and wine makers. Applications with level sensors have been used for decades in large refineries, water treatment plants, and chemical plants. With sensor prices falling,..... Listed under: Sensor – Transducer – Detector Projects

743. Weather Monitoring System Using TIVA This is Tahir Ul Haq and introduces you to another member in the family. This time the project is named as Weather Monitoring System. This is another TIVA based project presented by students of UET LHR. Weather monitoring plays an important role in human life,..... Listed under: Temperature Measurement Projects

744. Analog reading box using an Arduino I made this box for my music project to our school. This is only tutorial for the box, no for playing melody. It´s based on serial connected switches. You will need: Some wire 6x switch 1x LED 1x 330 ohm resistor 5x 2000 ohm resistor..... Listed under: Metering – Instrument Projects, Projects

745. Washing machine countdown timer using Arduino Hello, and welcome to my instructable for a washing machine countdown timer. The timer is operated with the very popular Arduino micro controller. See here for more information. Arduino Home Page Aim The aim of this project is to be able to delay the start..... Listed under: Clock – Timer Projects, Home Automation Projects

746. BLC Using Arduino Emulator What is this BLC? Ans: Binary logical Calculator using Arduino Uno R3. Formally we are doing Arduino project which is real-time application in introductory labs and other places. This is all about how to create Arduino Uno project which does some basic computation for our..... Listed under: Other Projects

747. Nintendo Keyless Entry System using an Arduino Use a Classic Nintendo controller to lock and unlock your door! The output from the Controller is read by an arduino and it looks for a particular combination of buttons, once the combination is entered it sends a signal to eject a Cd-Rom Drive which..... Listed under: Home Automation Projects, Projects, Security – Safety Projects

748. DIY Cheapest Bluetooth Controlled Home Automation Step 1: COMPONENTS REQUIRED Bluetooth module (HC-05)AT89S52/C51/S51/C52 microcontrollerRelay Driver ULN2003ARelayResistances and capacitors as circuit diagram depicts(below)power module(if the input is more than 5V or else not necessary)IC 7805(5V voltage regulator)1000uF capacitor10uF capacitorled and resistance(as per convenience so that led doesn't get damaged) IMPORTANT NOTE: USE..... Listed under: Bluetooth Projects

749. DIY Infrared Sensor Module using Arduino Have you ever wanted to make a line following robot but the infrared sensors were too expensive for you? Do you want to upgrade the robot in my other instructable? Well this instructable comes in two stages, Stage 1 is the prototyping stage, where you..... Listed under: Projects, Sensor – Transducer – Detector Projects

750. Rock Paper Scissors Spock Lizard using Arduino Introduction: Okay, I cheated. Any similarities between previous Instructables uploaded by me and the graphics, pictures, text and / or programming code is purely intentional. It certainly made putting this one together a whole lot easier. This Instructable is my Arduino version of the Rock..... Listed under: Game – Entertainment Projects

751. Simple 3 Button On-off With 12f629 (mikroC) a simple 3 buttons on-off with pic12f629. it's written with MikroC Step 1: The Code... start the code with ''int''---------- int x0,x1,y0,y1,z0,z1; ////// with this the GPIO outputs could stay on or off void main() { GPIO = 0x00; ////// all outputs are 0 CMCON..... Listed under: Other Projects

752. Make your plant smile using Arduino This is a funny project that makes our plants “talk” to us. It’s very simple and you can create it in few hours. We use a sensor to read the soil moisture of our plant and a led matrix to dislay how the plant “feel”..... Listed under: Game – Entertainment Projects, Home Automation Projects

753. Cheap 2-Way Bluetooth Connection Between Arduino and PC INTRODUCTION In the guide, I will explain how I managed to send data back and forth between a PC and Arduino via a cheap Bluetooth HC-05 transceiver, which can be found for less than $10 on ebay with the breakout board. The version I have used..... Listed under: Ideas, Interfacing(USB – RS232 – I2c -ISP) Project Ideas

754. Getting Started With the Particle Photon (Internet Controlled LEDs) In the previous instructable I showed you how to get started with IoT using the nodeMCU, in

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

755. Auto Fish Feeder using Arduino How often do you ever forget to feed your fish? Well, for me I don't forget that much. I just couldn't go out town for a couple of days and also be ridiculous if I should bring my tank along. When I won a Sparkfun..... Listed under: Home Automation Projects

756. Interfacing Servo Motor With NodeMCU This here is my first Instructable project. So you want to get started with NodeMCU? Well, I'm here to share with you.Today, I'm going to show you how to get started with NodeMCU. Let's GO ! NodeMCU has on board ESP8266-12E makes the board suitable..... Listed under: Motor Projects

757. Laser-guided Ghost Climber using an Arduino Almost inevitably, when I try to climb the same route I'll forget exactly what sequence of holds they used and end up following a slightly different path. Even when I remember exactly which course to follow, I'll still wonder whether I'm doing it as quickly..... Listed under: Game – Entertainment Projects, Projects

758. The Jack'O Lantern Early Warning System using Arduino This was originally going to be a tutorial on how to hook up a pumpkin to the internet so that the lights inside it could be controlled via twitter, text message, motion or more. To get started I carved a pumpkin for the first time..... Listed under: Security – Safety Projects

759. Basic IC Tester Using Arduino NANO 1. Components required for this project. 2. Procedure to do this project. 3. Coding of Arduino Nano with verification. 4. Circuit diagrams. 5. Simulations and application list. So lets begin.....! Step 1: What This Project Dose ? Basic Information and working of this project is,..... Listed under: Other Projects

760. Make your own 1×1 22 IO pin Ardunio Compatible Tested ExtraCore boards and kits are now available for sale from Rugged Circuits. What is it? This Instructable will give you all the files and information you need to make your own Arduino Compatible in small surface mount package. It requires a board manufactured to..... Listed under: How To – DIY – Projects, Projects

761. MFRC522 RFID Reader Interfaced With NodeMCU If you have noticed in an office before, you would be probably aware of those RFID cards or Tags that would unlock specific doors depending on your access.Well let's make a simple NodeMCU RFID reader using the MFRC522 module, and program the NodeMCU to provide..... Listed under: Other Projects

762. Led Star with Arduino and WS2811 Neopixels Description This little project makes a great ornament to hang in your window at Christmas time. It is a 20" wide star with 50 "neopixel" leds around the perimeter. Each led is individually addressable and it is controlled by an arduino device which can be..... Listed under: Game – Entertainment Projects, LED Projects

763. MQTT and Wifi Powered Mailbox Flag A couple of years I embarked on my own home automation project. It started off by building a server controlled 433 MHz transmitter build with an Arduino to switch lots of cheap PT2262 based remote switches. Later I added an Arduino based receiver for my..... Listed under: Wifi - WLan Projects

764. Arduino Joystick Mouse Control Code Using the Mouse library, you can controls a computer's onscreen cursor with an Arduino Leonardo, Micro, or Due. This particular example uses a pushbutton to turn on and off mouse control with a joystick. Cursor movement from the Arduino is always relative. So every time..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects, Projects

765. Instructables Hit Counter (ESP8266-01) Some time ago, I tried to make an "Instructables Hit Counter" using the Instructables API, and an Arduino Uno with a wired network shield. However, with the limited RAM of the Arduino Uno, I was unable to get the system to work. A while ago, I noticed..... Listed under: Wifi - WLan Projects

766. Arduino The 5$ Karduinoss pad So, looking at these Kaoss pads and alike hardware, I found that there is hardly any point in this device being so expensive, when you just want to use it as MIDI controller. Going through my parts bin, I found a Synaptics touchpad from an old..... Listed under: Sensor – Transducer – Detector Projects

767. Arduino Modules – Flame Sensor Quick and simple start guide for using and exploring the Flame Sensor module with an Arduino. The model in the example I

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

768. Control Servo Motor Using Accelerometer Lets begin with another cool instructable. In this Instructable we will learn how to control the position of Servo Motor using Accelerometer with NodeMCU. Step 1: Things to Be Collected To begin with this instructable all you need is : Hardware Requirement ADXL335 : Accelerometer..... Listed under: Motor Projects

769. OLED Display (SPI) With Particle Photon Particle Photon is a tiny micro controller, just about the size of an arduino nano. But the photon is designed for easy IoT prototyping, it supports OTA updates to its firmware. So all we have to do is get it connected to the internet and we..... Listed under: LED Projects

770. Read ASCII String using Arduino This sketch uses the Serial.parseInt() function to locate values separated by a non-alphanumeric character. Often people use a comma to indicate different pieces of information (this format is commonly referred to as comma-separated-values), but other characters like a space or a period will work too. The values..... Listed under: LED Projects, Metering – Instrument Projects, Projects

771. Arduino Controlled Lego Lighthouse Lighthouses have been guiding boats to safety for thousands of years. One of the earliest and most notable of these was the Pharos of Alexandria. This huge structure stood for nearly two thousand years. When deciding on a lego project, I wanted to build something..... Listed under: Game – Entertainment Projects

772. Romantic Led Heart SMD Hi makers! This is my first instructables and I want to address some important things firts: I made this project with the idea of using the lest amount of tools so that everyone could do it! Even I don't have lot's of tools, only the..... Listed under: LED Projects

773. Interface I2C LCD Using NodeMCU Wassup Makers!! In this Instructables we will learn how to interface an LCD (Liquid Crystal Display) to the NodeMCU board. These 16x2 LCDs are very popular and broadly used in electronics projects as they are good for displaying information like sensor data from your project, and also they are very cheap..... Listed under: LCD Projects

774. Arduino Sprinkler System plus Web control A smart sprinkler system for the rest of us... No soldering involved ! Just pile up a couple of shields on top of an arduino and control your sprinkler system from anywhere. A couple of friends wanted to replicate the sprinkler system presented in this..... Listed under: Ideas, Internet – Ethernet – LAN Project Ideas

775. OLED Interfaced to NodeMCU OLED!! What is an OLED? OLED (Organic Light Emitting Diodes) is a flat light emitting technology, made by placing a series of organic thin films between two conductors. When electrical current is applied, a bright light is emitted. OLEDs can be used to make displays and lighting. Because..... Listed under: LED Projects

776. Arduino Controlled Relay Box This project is designed to help you construct some relay boxes for controlling power from your wall socket using an arduino or microcontroller. The inspiration for writing an instructable came when I decided to build some relay boxes for my personal Garduino project. For safety concerns..... Listed under: How To – DIY – Project Ideas, Ideas

777. ESP8266 ESP-12E Arduino Clock W/ Outside Temp & LEGOS & NeoPixel Ring We went all 'cord-cutter' and ditched our Cable box and realized something was now missing in our family room...the oh so familiar LCD clock that was always present. I decided to get to work on a replacement and had some fun with it. If you're like me..... Listed under: Clock – Timer Projects

778. Arduino Chicken Coop Controller Over the last few years my family has been keeping ex-battery hens - they are about 18 months old and have had a horrendous life kept cooped up in small cages in large warehouses. As much as we love these little bundles of joys and..... Listed under: Home Automation Projects, Projects

779. Debounce an input using Arduino This example demonstrates how to debounce an input, which means checking twice in a short period of time to make sure it's definitely pressed. Without debouncing, pressing the button once can appear to the code as multiple presses. Makes use of the millis() function to keep track..... Listed under: How To – DIY – Projects, Projects

780. Arduino Calculator In this Instructable I will show you how to make an Arduino calculator that is just as good as any other calculator (well... sort of). Even though

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

781. ESP8266 Basement Monitor My basement gets wet when it rains a lot so I wanted a way to monitor it. I decided to try using an ESP8266 as it has built in WiFi. I paired that with a DHT22 Humidity & Temperature Sensor and a float sensor to..... Listed under: Sensor – Transducer – Detector Projects

782. DIY AM Radio With Arduino After I finished my last project, I couldn't stop thinking how to build an AM receiver, that would also operate in conjunction with my little friend Arduino. To minimize a workload and complexity, especially with RF part of the circuitry, I come up to conclusion,..... Listed under: How To – DIY – Projects, Projects, Radio Projects

783. Blink Without Delay using Arduino Sometimes you need to do two things at once. For example you might want to blink an LED (or some other time-sensitive function) while reading a button press or other input. In this case, you can't use delay(), or you'd stop everything else the program while..... Listed under: LED Projects, Projects

784. Controlling Devices in Swift With BLE In this project we will use an iPhone to control devices connected to an STM32 device. The project is a starting point for more exciting experiments such as remote controlled robots or any other thing you might want to control in your home. I encourage..... Listed under: Other Projects

785. ESP32 Solar Weather Station For my first IoT project I wanted to build a Weather Station and send the data to data.sparkfun.com. Small correction, when I decided to open my account in Sparkfun, they were not accepting more connections, so I choose another IoT data collector thingspeak.com. Continuing... The system..... Listed under: Solar energy projects

786. Home Made Arduino Prototype Shield Hi. I've just got myself an Arduino Uno R3 and I'm really new in the world of Arduinos. There's so much to learn and explore 🙂 One of the first shields that I'm tempted to buy is the Prototype Shield. I think building a prototype..... Listed under: How To – DIY – Project Ideas, Ideas

787. Arduino Timer Interrupts Timer interrupts allow you to perform a task at very specifically timed intervals regardless of what else is going on in your code. In this instructable I'll explain how to setup and execute an interrupt in Clear Timer on Compare Match or CTC Mode. Jump..... Listed under: Clock – Timer Projects, Projects

788. CO2 Ppm Sensor Logger ($140) The goal of this project is to build a cheap alternative to measuring CO2 ppm in the air. It's a nice simple way to see over-time change in ppm using a cheap NDIR carbon sensor and a temperature/pressure sensor to achieve better accuracy. In this..... Listed under: Sensor – Transducer – Detector Projects

789. Omnik Inverter Off It's Cloud and on My MQTT I have a solar power installation using an Omnik string inverter. Omnik is a China based manufacturer of PV inverters and they make extremely efficient devices. Optionally, you can install a WiFi module to make it "connected". I am very content with the device, with..... Listed under: Wifi - WLan Projects

790. Make an Arduino LCD shield In this short tutorial we make an Arduino LCD shield. Updated 18/03/2013 Today we are going to make an Arduino shield with an LCD module. More often than not I have needed to use an LCD shield in one of my projects, or with the..... Listed under: LCD Projects, Projects

791. Web Client using Arduino This example shows you how to make a HTTP request using an Ethernet shield. It returns a Google search for the term "Arduino". The results of this search are viewable as HTML through your Arduino's serial window. Circuit The Ethernet shield allows you to connect..... Listed under: Internet – Ethernet – LAN Projects, Projects

792. LED Head Arduino TED LED HEAD TED meet the world. I have always been interested in a bare-bones Arduino but never really saw the point if it was not practically useful, This is my entry into Little Bits contest, I tried to stay true to the " little bits"..... Listed under: Game – Entertainment Projects

793. Cute Drawing Buddy V1, SCARA Robot – Arduino I want to make a robo arm with less cost which draw cute pictures. That robot want to make my Daughter

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

794. Arduino Esplora Remote This example is designed to be used with a Processing sketch. Processing is an open source programming environment. The application on the computer reads the sensors on the Esplora board and controls the buzzer and the RGB LED through a graphical interface. The image in..... Listed under: Projects, Radio Projects

795. Weather Portal There have recently been a series of web query projects that use the miraculously tiny and affordable ESP8266 micro controllers. Most have involved the output going to a tiny screen with small graphics. The local YMCA in Anchorage just completed a beautiful remodel but lacked..... Listed under: Other Projects

796. Access control with Arduino plus Keypad 4×4 plus Servo Hi guys, I bring a new instructable for arduino, the control access with password, 4x4 keypad and a servo. We will use the Password and Keypad librarie for arduino, besides using the servo library, but this project can also be modified by changing the servo,..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects, Motor Projects, Projects

797. Animatronic Eyes and Wii Nunchuck Part 2 using Arduino After I built the animatronic eyes in PART 1, I wanted to complete the face with a voice and possibly moving eyebrows. If you look back at my PART 1, you'll see that for the base I used a model from Thingiverse. Once you have..... Listed under: Game – Entertainment Projects

798. Adafruit's Circuit Playground As a Robot Controller With Bluetooth A friend gave me one of Adafruit's circuit playgrounds (developer edition) to use, and I wanted to see would it make a good robot controller. The circuit playground is packed full of features like sensors, neo-pixels and even an accelerometer. I wanted to add a..... Listed under: Robotics – Automation Projects

799. iPod Information Screen using Arduino My girlfriend, a music buff, asked me to come up with a better way for her to look at the track information of the current song playing on her iPod touch while she was using it in the car. Those of you that have or..... Listed under: Phone Projects, Projects

800. Autonomous Race Car using Arduino Build this autonomous driving robot car based on a old RC toy car. I removed the radio control board from the car and replaced it with a brain in the form of an Arduino UNO board (plus a motor driver board) and gave it an..... Listed under: Car Projects

801. Manual Controlled Toll Gate Using Push Button n this Instructable we will simulate an Toll Booth Gate by using a manual Push Button to open and close the gate. How Does It Work? When the vehicle comes in front of the gate, the push button is pressed & the gate is opened, this is done by sending a..... Listed under: Motor Projects

802. Arduino powered GLCD (Graphic LCD) Displays are always nice. So far I've just been demonstrating how to use 7-segmented displays to display numbers using very few resources. But what if you want to display text? Or pictures? Or both? Well in order to do that, you're going to need a..... Listed under: LCD Projects

803. Measure Your WiFi Signal Strength Using Particle Photon WiFi has become an integral part of our life and daily billions of people use WiFi as a method to access the internet. But the range of WiFi is limited, unlike a cellular connection. A normal WiFi router usually has a range of about a 100m..... Listed under: Wifi - WLan Projects

804. ATTiny powered Arduino Projects Arduino is a great platform. No question. But what if I told you that you could take your entire board and compact it into tiny package. And I mean really small. The chip in the picture is an ATTiny84, and that is the big version..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects, Projects

805. Irrigation logic controller/project log using Arduino Hello, I am going to explain my project in just a minute, but first I wanted to explain how I became involved in this project. I like to save money were I can, so it is not hard to understand why I carpool to work..... Listed under: Home Automation Projects

806. Arduino Self-Driving Car This is basically a Self-Driving Car powered by Arduino R-3 Development Board and a L293D Motor Shield.It uses the data given by the

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

807. Keyless Entry / Arduino Keyless Entry System Enter the correct code into the keypad and the servo will unlock the door. Enter the incorrect code and Sorry you stay out. There was a couple of stipulations i wanted in my Keyless Entry system: Helper Light. A light that would..... Listed under: Calculator Projects

808. An Arduino real time clock shield Today we are going to make a real time clock Arduino shield. Doing so will give you a simple way of adding ... real time capability to your projects such as time, date, alarms and so on. We will use the inexpensive Maxim DS1307 real-time..... Listed under: Clock – Timer Projects, Projects

809. Twitter Physical Client Using Arduino In this project I'm building a physical Twitter client using Arduino and a flag, basically an arduino powered retweet indicator, whenever any of my tweets is retweeted some physical action will happen to notify me of that. You'll need: 1. Flag. 2. Arduino. 3. Laptop..... Listed under: Internet – Ethernet – LAN Projects

810. Particle Photon – Wearable Pulse and Temperature Sensor The Particle Photon is a microcontroller suitable for wearable project's considering it's small form factor and that it supports OTA updates. For those of you who do not know what a Particle Photon is it is a tiny microcontroller with on board WiFi (Cypress WiFi chip) and..... Listed under: Temperature Measurement Projects

811. Simple RFID access system using Arduino In this tutorial you can make an RFID access system. It's very simple and can be used with a wide variety of end-uses. Updated 18/03/2013 The purpose of this project is to prototype a basic RFID access system. Although it is not that complicated, this..... Listed under: Projects, RFID - NFC projects, Security – Safety Projects

812. IOT BMI Indicator and Mood Light Using Feather Huzzah and IFTTT Recently my wife has suggested that I should lose a few pounds in weight (too much time geeking out and not enough time in the gym). With that in mind -and in true nerd fashion- I wanted to create a method to see my progress,..... Listed under: LED Projects

813. Clock Four – Scrolling text clock using Arduino Introduction Time for another instalment in my highly-irregular series of irregular clock projects. In this we have "Clock Four" – a scrolling text clock. After examining some Freetronics Dot Matrix Displays in the stock, it occurred to me that it would be neat to display..... Listed under: Clock – Timer Projects, Projects

814. The Pill Reminder using Arduino Back in January 2014 I was at a meetup of Baby Boomer Makers at TechShop in San Carlos, California. We were going around the table, each taking a turn to talk about projects we'd like to do. Bob spoke up to describe a problem his..... Listed under: How To – DIY – Projects

815. IoT – Automatic Router (and Server) Reset Usually inventions are invented to serve a need or to solve a problem. So this small gadget that i constructed came to serve a need of mine.I have a NAS, Atom based file server, that runs on Ubuntu, but from time to time the operating..... Listed under: Internet – Ethernet – LAN Projects

816. Bear With Me Using Arduino This instructable teaches how to make our Bear With Me system, a prototype that allows two users to tangibly send and receive hugs (as well as motion) in near real-time. The bears will be able to send tweets when physically hugged. Their hearts will glow..... Listed under: Game – Entertainment Projects

817. Getting Started With Freescale K64F There is a lot of buzz going around Arduino and the series of boards. One of the most used board from the Arduino series is the Arduino Uno. But what many people don't notice is that there is a board similar to Arduino UNO but has..... Listed under: Other Projects

818. Using switch to control Piezo speaker with Arduino In this project, we will learn how to use a speaker (peizo sounder) and use switch button to change the pitch of the sound. Sorry about this one, you might find it a bit difficult to digest at first, and I didn't realise it's actually..... Listed under: Projects, Sound – Audio Projects

819. WiFi Bathroom Humidity Sensor W/Fan Control, App & Automation https://youtu.be/EOwaKpxijXI Step 1: The Board & Shields Wemos D1 Mini 11 digital

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

Arduino Compatible with nodemcu DHT11 Temperature: -20~60°C Humidity: 20-95%RH (±5%RH) It uses D1 and..... Listed under: Home Automation Projects, Sensor – Transducer – Detector Projects

820. How to set up a Public Window Public Window (http://www.publicwindow.net) is an open source project which allows artists to display their creations in a window and have people from all around the world interact with it. This is a step-by-step guide on how to set up a Public Window of your own. A..... Listed under: Home Automation Projects, Video – Camera – Imaging Projects

821. Moisture Control Unit – MCU In this Instructables, you will see how to Interface Moisture sensor to your NodeMCU. And check the moisture value and the same to be displayed on the LCD. We'll use Liquid Clear Crystal to display the moisture value. This 16x2 LCD is very popular and broadly used in electronics projects as they..... Listed under: LCD Projects

822. Sonar For The Blind using Arduino This is a project I'm calling Tacit. No, I didn't bother making an awkward backronym for it, it just seemed like an appropriate name that's a lot shorter (though less descriptive) than "Hand-Mounted Haptic Feedback Sonar Obstacle Avoidance Asstance Device". It measures the distance to things and translates that into pressure..... Listed under: Medical – Health based Projects, Projects

823. Backpack Anti-Theft Alarm using Arduino If you're a student, like me, then you have heard of all the theft that occurs on campuses today. I can't even leave my backpack alone for five minutes without worrying about it getting stolen. To ease my mind and to help fellow students, I've..... Listed under: Home Automation Projects, Security – Safety Projects

824. Automatic Water Heating System 2.0 This is the modification of my old version. This is a technology in small box. In the previous version there is no possibility of adjusting the temperature that we need. It had only 2 temperature setup. In this version I added temperature adjustment using rotary..... Listed under: Temperature Measurement Projects

825. Automated 5 Gallon Bucket Feeder This bucket feeder design was motivated by the fact that my wife and I live in different cities and have a cat that hates to ride in the car. The automated feeder makes it possible to be able to leave our cat at one apartment..... Listed under: Other Projects

826. Arduino Breadboard Shield Are you tired of having a hard time trying up a circuit on a breadboard because your arduino takes up a lot of space? This shield can be a solution to your problem! The Arduino breadboard shield is again, an accessory for your arduino board..... Listed under: Development Board – Kits Projects

827. Arduino Serial Communication Code Arduino can send output through serial communication to your computer over USB. The output can be anything such as status, text, sensor reading, value, number etc. You can view the status output by clicking Serial Monitor button at Arduino Environment software. Instruction; 1) Connect your..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects, Projects

828. Universal Remote Using ESP8266(Wifi Controlled) This project is to replace the conventional remote control for all the home appliances like AC, TV, DVD players, music system, SMART appliances !!! Making a whole junk of remote littering around, making us puzzle!!! This project will save us from the junk to remotes..... Listed under: Wifi - WLan Projects

829. Connect several digital inputs to one analog input using Arduino I often run out of digital pins on my Arduino. Anything as complicated as, say, a video game controller, was near impossible with the amount of pins I had available. Multiplexing buttons works, but it requires lots of connections and soldering. So, I put together..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects, Projects

830. RC tank with a moving FPV camera using Arduino In this instructable I show you how to build remote control tank with FPV camera. At the beginning I build only RC tank without FPV camera but when I was driving it in the house I have not seen where it is. So I came..... Listed under: Video – Camera – Imaging Projects

831. WiFi Car Using NodeMCU We have build car using many transmission technologies. But what about a WiFi Controlled Car? Actually speaking..Wifi is till now the most promising technology and engineers are using that tech to improve it more and more. This tech is most popular today and will remain..... Listed under: Wifi - WLan Projects

832. Arduino home energy monitor shield Although products are becoming more and more available for monitoring your home power usage, I'm one of those idiots

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

833. PCB – Skateboard Floodlight V2 A while back, we constructed a pair of LED skateboard truck-risers. That project was intentionally created without the aid of advanced tools and techniques. We decided to try the concept again but without limiting ourselves. This time around we used custom designed PCBs and 3D printed..... Listed under: LED Projects

834. Arduino Phone Book Ever wanted to have a Phone Book, controlled using a microcontroller, which is very easy to use, and you can use it while talking on phone, and is saving data on SD Card? then this instructable is for you. In this instructable you will learn..... Listed under: Phone Projects

835. Soundgraffiti with arduino mega So we haven been working on the new soundgraffiti board. This is an installation wich creates sounds using sprayed water. The connection is made with water. We used copper plates as our sensor. the plates had a cutout line in the middle of 0,1 mm..... Listed under: Sound – Audio Projects

836. Arduino: Electrical Engineering Basics In this week's arduino tutorial, we take a bit of a detour and focus on some key elements of electrical engineering design that we'll be using in future episodes. [box type="note" color=" #202020 " bg="#ffbb00 " font="verdana" fontsize="14" radius="20 " border="#000" float="right" head="Attributes"]Thanks to Jeremy..... Listed under: Other Projects, Projects

837. Simple IoT Remote Switch With MQTT and ESP8266 Many years back when I was still quite heavily involved in the day-to-day company IT matters, we need to subscribe to a service called "Smart Finger" when we put our servers in a datacenter. Basically what this service is all about is to allow datacenter..... Listed under: Robotics – Automation Projects

838. Temperature Sensor for Shower using Arduino With this device you diminish the use of water in your house or work. Instead of waiting to see vapor in the shower to get in, this device help you to know when the water its at the temperature you want and you can instantly..... Listed under: Home Automation Projects, Projects, Temperature Measurement Projects

839. Fifty Dollar Box Bot Using Arduino The objective is to construct a programmable hobby bot that is affordable and simple to make. The parts will be purchased from places such as Wal-Mart, Radio-Shack, any Hobby Store, or online store that is accessible to the public. The price range is 50 dollars..... Listed under: Robotics – Automation Projects

840. Motion Controlled Ultrasonic Lamp using Arduino Recently I've been learning about Ultrasonic waves and how to harness their power. It's simple enough to make some type of sonar device, but I wanted to take at a step cooler and see if I could use Ultrasonic waves to not only detect movement,..... Listed under: Home Automation Projects, Sensor – Transducer – Detector Projects

841. Arduino Interrupts and Debouncing Interrupts are an extremely useful, yet often feared element of microprocessors. Interrupts allow you to run a program, while still being able to react to asynchronous input from the outside world. [box type="note" color=" #202020 " bg="#ffbb00 " font="verdana" fontsize="14" radius="20 " border="#000" float="right" head="Attributes"]Thanks to..... Listed under: Other Projects, Projects

842. Chat Server Using Arduino A simple server that distributes any incoming messages to all connected clients. To use, open a terminal window, telnet to your devices IP address, and type away. Any incoming text will be sent to all connected clients (including the one typing). Additionally, you will be..... Listed under: Internet – Ethernet – LAN Projects, Projects

843. Monkey Automatons Using Arduino This instructable will guide you through the process of building a set of automaton monkeys in the style of "Hear No Evil, See No Evil, Speak No Evil." Our design ends with two monkeys reacting at the push of a button located in the Speak..... Listed under: Game – Entertainment Projects

844. CardioSim First of all,this is my first Instructable, and I'm not a native English speaker (or writer), therefore I apologize in advance for the overall low quality . However, I hope that this tutorial can be helpful for people using a heart rate (HR) monitor system..... Listed under: Clock – Timer Projects

845. Arduino Controlled Motion Sensor In this Instructable, I'll be explaining how to build a motion activated alarm! It uses an Arduino microcontroller, a PIR (passive

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

846. Spot Welder 1-2-3 Arduino Firmware Why another spot welder project? Building a spot welder is one of the (arguably few) cases in which you can build something for a fraction of the price of the commercial version with comparable quality. And even if build-before-buy were not a winning strategy, it…... Listed under: Other Projects

847. MaKey MaKey Shield for Arduino MaKey Makey is a project created by Eric Rosenbaum und Jay Silver. It's an Arduino based keyboard. A very special keyboard, because you can use apples, bananas or Play Doh as keyboard keys. Sounds strange, but it works very well. How it works: The trick is…... Listed under: Development Board – Kits Projects, Projects

848. Classic Joystick to USB Adaptor using Arduino If you grew up in the early 1980's and were into video games, you probably had an Atari 2600, ColecoVision, or similar game console. The controllers or joysticks for each of these systems had a distinct feel that is different from today's game consoles or…... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects

849. 128×64 OLED Enclosure the Easy Way There are lots of Instructables on how to use SSD1306-based 128x64 OLED displays. Many of these write-ups are very informative but just about all of them look like an unfinished science project. (In fairness, most are directed at getting up and running with the display, not creating…... Listed under: LED Projects

850. Jar of Fireflies This project uses green surface-mount LED's along with an AVR ATTiny45 microcontroller to simulate the behavior of fireflies in a jar. (note: the firefly behavior in this video has been greatly sped up in order to be easier to represent in a short film. The…... Listed under: LED Projects

851. LEGO T-Intersection LED Traffic Light using Arduino Video not playing? See it on YouTube: http://www.youtube.com/watch?v=q0tiiWwC6Zo Background Every Christmas we set up a large LEGO train layout in a section of the living room. This year, I ended up winning an eBay auction for a number of older-model LEGO road plates, one of…... Listed under: Car Projects, Game – Entertainment Projects, LED Projects, Projects

852. Six wheeled All Terrain Vehicle (6WD) using Arduino Hello, In this post we"ll be making a Six wheel drive all terrain vehicle (ATV). These are rare and hence expensive robots (at least in India). I made this ATV as my summer project. Dagu manufactures a similar 6WD chassis but its way too expensive…... Listed under: Robotics – Automation Projects

853. VRBOT (Voice Recognition Robot) In this Instructable we'll make a robot (more like a RC car) which is controlled by voice i.e. Voice Recognition. Before I start to give you any further details one must know that this is Voice Recognition and not Speech Recognition that means the controller…... Listed under: Robotics – Automation Projects

854. ESP8266/ESP-12 Arduino Powered SmartThings DS18B20 Temp. Sensor We all like to know what the current room temperature is, and sometimes what the temperature is in another room, or maybe even in your vacation house on the other side of the world. Maybe you want to monitor the temperature in your pet Lizard's…... Listed under: Temperature Measurement Projects

855. Model Police Car using an Arduino We wanted to build a model police car with working lights and sirens. Then we decided to add a motor and instead of using a switch to turn everything and off we used a photodiode. For our car the photodiode signal is a simple on off…... Listed under: Game – Entertainment Projects, Projects

856. Drain Clog Detector Don't let a clogged drain slow you down!Coming back from our vacation, me and my wife were surprised by the water covering the floor of our apartment, and we found out it's not even clean water, it's drain everywhere. After clearing the drain and cleaning…... Listed under: Sensor – Transducer – Detector Projects

857. Remote Control: ESP8266 With Coin Cell The big problem using the ESPs is the power consumption when Wifi "goes up", about 100-200mA, peak up to 300mA. Normal coincells deliver a few mA, peak up to 20-40mA. But for the ESPs the voltage will collapse. We need "a little help of my…... Listed under: Other Projects

858. Open a box with the flick of a switch! Have you ever given something to someone and wished that the box you gave it in opened automatically? No? Well

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

859. How to turn inkjet printer to print on Coffee using Arduino The aim of this project is to make latte printer, I used 1 printers and 1 scanner , it prints one line a time, all what I have done is hacking the sensors of the printer and I used Arduino Uno to send different values..... Listed under: Game – Entertainment Projects, Home Automation Projects

860. Alexa Controlled Servo Introduction I have a laptop on a shelf in my office that monitors several cameras that are around the outside of my house. They alert me to deliveries and visitors. While I can use a web browser to see their images it is easier to just..... Listed under: Other Projects

861. Arduino + fischertechnik TX-C – Connecting I2C True Colour Sensor Colour reading is a real issue for industrial models. I've been working on it for more than 12 months now, since December 2009. After many months of hard work, • starting with the standard colour reader (season 1) with features a red LED, •..... Listed under: Projects, Sensor – Transducer – Detector Projects

862. The 4x4x4 LED cube using an Arduino In this instructable I will show you how to make a 4x4x4 LED cube that will be controlled by an Arduino Demulionove. now yes you might say" that Arduino has only 14 I/O pins well also the 6 analog pins can be used as pins..... Listed under: LED Projects, Projects

863. Make Your Own Connected Heating Thermostat and Make Savings With Heating What is the purpose? Increase the comfort by heating your house exactly as you wantMake savings and reduce greenhouse gas emissions by heating your house only when you needKeep control on your heating wherever you areBe proud you did it yourself Step 1: How Does It Increase Your Comfort ?..... Listed under: Temperature Measurement Projects

864. Gravity Touch bluetooth glove using Arduino Hey guys! I'd like to share with you the input device I created specifically to interact with AR glasses like the Google Glass, Meta, Moverio BT or with the VR headsets like Oculus Rift, Samsung Gear VR, vrAse, Durovis Dive. Those new products are amazing..... Listed under: Game – Entertainment Project Ideas, Home Automation Project Ideas, Internet – Ethernet – LAN Project Ideas

865. Froggy World 3 The Seesaw Using Arduino Froggy put on a little eye makeup before heading out for the new ride, "The Seesaw." The Seesaw is the third ride in the amusement park for adventurous plastic frogs. This ride received Froggy from "The Boot" and slides him over to a waiting rail..... Listed under: Game – Entertainment Projects

866. Solar Weight-Based Plant Management With ESP32 Growing plants is fun and watering and caring for them is not really a hassle. Microcontroller applications to monitor their health are all over the internet and the inspiration for their design comes from plant's static nature and the ease of monitoring something that doesn't..... Listed under: Solar energy projects

867. Arduino DIY SD Card Logging Shield Ready-made SD card logging shields for the Arduino typically cost in the range of $15 - $25. This is quite reasonable, but we might save a couple of bucks if we make our own. Not to mention all the fun in building it. Forget about..... Listed under: Other Projects, Projects

868. Virtual USB Keyboard Using Arduino Communicating with a host computer can allow a simple Arduino-based system to gain access to a wide variety of devices and information. Most people link an Arduino to a host using serial communications across a USB connection with custom code running on the host to..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects, Projects

869. Temperature and Humidity Monitor Using DHT22 & MAX7219 We always need to see the temperature and humidity when we sitting in our house to know whether we need to turn on/off AC, heater,cooler,etc. So here we have build this circuit to display temperature and humidity on the 7-segment displays, and we have used..... Listed under: Temperature Measurement Projects

870. Construct A Musical FootBall Using Arduino This project is to construct a musical football. The reason for my project is that I was inspired by a little kid with austim who love sports and music. So what better way to have fun then have a ball that you can play with..... Listed under: Game – Entertainment Projects

871. Dynamic LED Lighting Controller for Art Introduction: Lighting is an important aspect of visual art. And if the lighting can change with time it can become a

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

872. Simple Arduino L.E.D Police Lights This was one of the first programs i wrote for the arduino after having it a few days 🙂 we will be making l.e.d police lights with minimal materials Step 1: You will need. You will need Arduino (or suitable clone) Breadboard 2x 240ohm resistors..... Listed under: Car Projects, LED Projects, Projects

873. Lightning Shutter Trigger for a Camera using Arduino I knew there were devices that could trigger a camera to fire during a lightning strike, but their circuits were more complicated than I wanted to make. I'm a software guy not a hardware guy so I decided to use an Arduino and that allowed me to write a..... Listed under: Projects, Video – Camera – Imaging Projects

874. Movement Activated Redstone This project is a motion activated redstone lamp. It works by using a crumble microcontroller and an ultrasonic distance sensor wired up to a relay. This project is being entered into the minecraft competition and any votes, favorites or comments would be greatly appreciated! Step..... Listed under: Other Projects

875. Dr Blinkenlights... (or how I learned to afford the BlinkM) I love the idea of the BlinkM (individually addressed RGB leds controlled with 2 pins), but not so much the price (nearly 15 quid each!). Luckily, the hardware is open source and somebody has brought out an alternative firmware (although if you know where to..... Listed under: LED Projects

876. Space Battleship Yamato 2199 With Trinket Microcontrollers Because of the remake of the animation and movie of Space Battleship Yamato, in addition to the attractive design of Bandai model. It make me interest to build this space battleship model again. Bandai not mention its scale, maybe ~1:2500 by estimation. https://youtu.be/b5TzmONvX3o https://youtu.be/SdxBiHjwRUM Step..... Listed under: Motor Projects

877. Arduino wall avoiding robot This instructable assumes very little with respect to prior knowledge. If there are any areas you feel could be improved or clarified, please feel free to message or comment and I will update. Here are all the details you need to produce a simple wall..... Listed under: Robotics – Automation Projects

878. Build A Light Suit Using Arduino Why build a light suit? Probably because I've watched tron a few too many times (the 1984 version of course). I'd just discovered Arduino and was very excited, I'd made LED's flash and buzzers sound but now I wanted to make something new and interesting,..... Listed under: LED Projects

879. ESP32 LoRa Changing Frequency What would you think about a program, made in the C language of the Arduino IDE, that makes the LoRa radio change frequency? This is what you will learn about in my video today, where you will learn about the differences between LoRa radio, LoRaWAN..... Listed under: Other Projects

880. Dot Matrix Printer from a CD/DVD Reader with Arduino Hey! Some time ago while going through the pages here in Instructables, something catch my attention, a printer made of a CD reader, and i was amazed. I thought: "This is incredible, I have to make one!" I know that these kind of projects don't..... Listed under: CNC Machines Projects, Video – Camera – Imaging Projects

881. Cardio Data Logger Although nowadays many portable devices (smartbands, smartwatches, smartphones,...) are available that can detect the Heart Rate (HR) and perform trace analysis, chest strap belts-based systems (like the one in the upper part of thr picture) are still widespread and used, but lacking the possibility to..... Listed under: Phone Projects

882. Arduino powered hangman giftbox/lockbox A medium sized box that requires the user to succeed in a game of hang man in order to gain access to the contents of the box. Great gift Idea!!! my Arduino sketch will be included in this instructible sorry for the poor quality pictures!..... Listed under: Game – Entertainment Projects

883. Mail Alarm After completing my GSM Home Alarm V1.0 and some time of using, I decided to make some modifications. https://youtu.be/obGU1exGBt4 In the hardware the main changes are the replacement of the ultrasonic sensor and the introduction of a keypad. On the software, I change the SMS notification by..... Listed under: Clock – Timer Projects

884. Measure RPM – Optical Tachometer using Arduino This Instructable will show you how to make a Portable Digital Optical Tachometer using an Arduino Uno.

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

885. How to build an Arduino WiFi 4×4 with Android Controller RC cars can be WiFi Cars...? RC cars are cool, but cheap RC cars have limited range and can only be controlled with the particular controller that was included with the car. I purchased a RC jeep, complete with 4 wheel drive, flexible suspension, and..... Listed under: Arduino Android, Internet – Ethernet – LAN Projects, Projects

886. Automatic Water Level Indication via SMS alert Summary Students will learn how to construct a water Level Indicator/Controller that monitors the level of the overhead tank by constructing a circuit that will notify the user via SMS if the water supply to an area/home is initiated and indicate how high the water..... Listed under: Projects

887. Water Level Indicator Summary In this project, we will create a water level indicator with three levels inside a tank using an Arduino and a water sensor, as well as three LEDs and a buzzer to indicate when the tank is full. Objectives To understand how a water..... Listed under: Projects

888. Nixie Clock Mood Barometer An unremarked casualty of Progress is the aneroid home barometer. These days, you might still be able to find examples in the homes of people over ninety, but millions more are in the dump, or on ebay. In truth, the old-school barometer didn't help itself..... Listed under: Clock – Timer Projects

889. Autonomous Control of RC Car Using Arduino This instructable shows how to modify an inexpensive RC car so it can be controlled by an on-board microcontroller. You can program the controller to make the car do any number of driving patterns and stunts. Once you have the car being controlled from the..... Listed under: Car Projects, Game – Entertainment Projects, Projects

890. ESP-Now Rainstick This fun little project will allow you the trivial joy of letting a electronic network announce that you have rain! The AI controlled, tear eliciting price'd Tesla has been rumored to have sensors that awaken the windshield wipers at the onset of rain. Being in..... Listed under: Other Projects

891. How to make a robotic dart shooting sentry Tools: Hot Glue Gun Laptop with Arduino software 22 awg hookup wire (black, red, yellow) wire strippers usb cable drill 1/16th drillbit exacto knife Parts: 2 tongue depressors 1 clothespin 1 rubber-band 1 dart 1 cup (paper or plastic) 1 arduino 1 breadboard 1 led 1 momentary button..... Listed under: Robotics – Automation Projects

892. Controlling Hand Drill with Roboduino using Arduino This will explain how we re-purposed a hand drill to re-spool solder using a roboduino (arduino compatible), two servos, and a DIY encoder. While one could use TRIACs to play with the AC power going into the drill, just using a servo to control the throttle..... Listed under: Motor Projects, Projects

893. Adding CV inputs to the Auduino granular synth When I first got into the Arduino I went looking for audio projects. One of the first things I built was TobaTobias' Auduino granular synth. I was so impressed I built a permanent unit in a heavy duty enclosure and incorporated it into my occasional..... Listed under: Interfacing(USB – RS232 – I2c -ISP) Projects

894. Measure Pressure With Your Micro:bit The following instructable describes a easy to build and inexpensive device to perform pressure measurements and demonstrate Boyle's law, using the micro:bit in combination with the BMP280 pressure/temperature sensor. Whereas this syringe/pressure sensor combination has already been described in one of my previous instructables, the combination..... Listed under: Other Projects

895. 3-Axis Magnetic Field Sensor Wireless power transfer systems are well on their way to replacing conventional wired charging. Ranging from tiny biomedical implants all the way to wirelessly recharging huge electric vehicles. An integral part of the research on wireless power is minimizing the magnetic field density. The International..... Listed under: Sensor – Transducer – Detector Projects

896. Quick and Easy Arduino Nightlight Honestly, how many people have been in this scenario (leave a yes or no in the comments) : It is 2:30 in the morning and you wake up with a need to do something whatever that may be (bathroom, forgotten homework assignment, project due in..... Listed under: LED Projects

897. Using an Arduino to Control an Infrared Helicopter In this Instructable we will explain how infrared signals are used by a remote to control a toy or device, then

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy

898. WiFi Controlled Camera Slider If you want to add interest to any video you are making, a good way to doing it is to add motion. There are an infinite number of motion effects you could use in your videos, but a classic, and very pleasing one, is a..... Listed under: Wifi - WLan Projects

899. USA Flag made with diffused LED using Arduino USA flag constructed using a total of 2,301 diffused red, white and blue LEDs completed with Arduino sketch animations, I hope this instructions helps anyone who wants to try this out. This flag can be displayed during the 4th of July, memorial day or during..... Listed under: Home Automation Projects, How To – DIY – Projects, LCD Projects

900. NeoPixel Reactive Table Welcome to my version of the LED reactive table! I was inspired by previous work using discrete LEDs, such as this one, but I figured it would be easier and more fun to use NeoPixels -- programmable RGB LEDs that can be set to any color you want..... Listed under: LED Projects

1 2 3 ... 5 6 Next

Search

Search...

Explore All Categories

Arduino Weekly Newsletter

Subscribe To A Specific Category

Get Notified Whenever There Is A New Project In Your Desired Category

Subscribe!

© 2022 Powered By Wise Technologies, Use Arduino for Projects

This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. ACCEPT Check Privacy Policy