# AIED 2013 Workshops Proceedings Volume 5

# The 4<sup>th</sup> International Workshop on Culturally-Aware Tutoring Systems (CATS 2013)

# Workshop Co-Chairs:

#### Emmanuel G. Blanchard

Department of Architecture, Design, and Media Technology Aalborg University at Copenhagen, Denmark

#### Isabela Gasparini

Department of Computer Science University of Santa Catarina State, Brazil

http://cats-ws.org/

# **Preface**

The 4<sup>th</sup> international workshop on Culturally Aware Tutoring Systems (CATS2013) is a follow-up to the three previously successful CATS workshop editions, organized in conjunction with ITS2008, AIED2009, and ITS2010. It discusses the place of culture in AIED research. Considering culture in this field is important because it is known to have a strong impact on many cognitive and affective processes including those related to learning. Furthermore, people with different cultural backgrounds develop alternative interpretations and strategies and do not similarly appraise their environment, which naturally reflects in their interactions with AIED systems.

For the 2013 edition of the CATS workshop, it was decided to put a particular emphasis on addressing the following topics: i) designing AIED systems to teach cultural knowledge and intercultural skills, ii) enculturating AIED systems (i.e., developing AIED mechanisms that incorporate cultural features), and iii) considering cultural biases/imbalances in the AIED research production, and ways to deal with them

The scientific quality of CATS2013 was ensured by an interdisciplinary program committee of 21 members representing 11 different countries and 4 continents. A total of five papers were accepted for presentation, and the workshop also includes an interactive panel discussion whose topic is: "AIED in non-western environments: Challenges and Opportunities".

We are most grateful to the many individuals who have made this half-day workshop possible. We thank the Program Committees of the International Conference on Artificial Intelligence in Education, especially workshop chairs Erin Walker and Chee Kit Looi for their help in the planning of this workshop. We wholeheartedly thank the members of the CATS 2013 Program Committee for having dedicated time to evaluate workshop submissions within a limited time frame.

Welcome to the 4<sup>th</sup> International Workshop on Culturally-Aware Tutoring Systems.

#### **Program Committee**

Co-Chair: Emmanuel G. Blanchard, Aalborg University at Copenhagen, Denmark

(Emmanuel.g.blanchard@gmail.com)

Co-Chair: Isabela Gasparini, University of Santa Catarina State, Brazil

(Isabela.gasparini@udesc.br)

Ryan S.J.D. Baker, Teachers College, Columbia University, USA

Benedict du Boulay, University of Sussex, UK

Jacqueline Bourdeau, TELUQ, Canada

Stefano A. Cerri, University of Montpellier, France

Vania Dimitrova, University of Leeds, UK

Birgit Endrass, Augsburg University, Germany

Geneviève Gauthier, University of Alberta, Canada

Monique Grandbastien, University of Nancy, France

Seiji Isotani, University of Sao Paulo, Brazil

W. Lewis Johnson, Alelo Inc., USA

Stan Karanasios, University of Leeds, UK

Paul Libbrecht, Martin Luther University of Halle, Germany

Samuel Mascarenhas, University of Lisbon, Portugal

Riichiro Mizoguchi, Advanced Institute of Science and Technology, Japan

Amy Ogan, Carnegie Mellon University, USA

Elaine Raybourn, Sandia Laboratories, USA

Matthias Rehm, Aalborg University, Denmark

Katharina Reinecke, Harvard University, USA

Ma Mercedes T. Rodrigo, Ateneo de Manila University, The Philippines

Silvia Schiaffino, Universidad Nacional del Centro de la Provincia de Buenos Aires, Argentina

Dhavalkumar Thakker, University of Leeds, UK

### **Table of Contents**

A Conceptual Model of Intercultural Communication: Challenges, Development Method and Achievements  Emmanuel G. Blanchard, Stan Karanasios and Vania Dimitrova.	1
Is the Brazilian HCI Community Researching Cultural Issues? An Analysis of 15 years of the Brazilian HCI Conference Isabela Gasparini, Marcos Hideshi Kimura, Sergio De Moraes, Marcelo Pimenta and José Palazzo M. De Oliveira.	11
Contextualised Student Modelling for Enculturated Systems Phaedra Mohammed and Permanand Mohan.	20
A Virtual Space for Children to Meet and Practice Chinese <i>Mei Si</i> .	30
A Synergic Neuro-Fuzzy Evaluation System in Cultural Intelligence Zhao Xin Wu, Roger Nkambou and Jacqueline Bourdeau.	39