

CONTACT INFORMATION	University of British Columbia Vancouver School of Economics 6000 Iona Drive Vancouver, BC, V6T 2E8	<i>Email:</i> jesse.perla@ubc.ca <i>Email:</i> jesseperla@gmail.com <a href="http://jesseperla.com">http://jesseperla.com</a> <a href="https://github.com/jlperla/">https://github.com/jlperla/</a>
CITIZENSHIP	Canadian, American	
INTERESTS	Macroeconomics, Machine Learning, Growth, Macro-Development, Bounded Rationality	
POSITIONS	Associate Professor, UBC Vancouver School of Economics Associate Member, UBC Computer Science	
OTHER AFFILIATIONS	Member, UBC Centre for Artificial Intelligence Decision-making and Action (CAIDA) Faculty Affiliate, UBC Institute of Applied Mathematics Core Faculty, UBC Centre for Computational Social Science Faculty Affiliate, Stone Center for Wealth Inequality	
EDUCATION	Ph.D., Economics, May 2013 New York University, New York, NY, USA <i>Fields:</i> Macroeconomics, Industrial Organization <i>Committee:</i> Boyan Jovanovic, Thomas J. Sargent, Jess Benhabib	
	B.Sc. Applied Mathematics, 1997 Columbia University, New York, NY	
PUBLISHED PAPERS/REFEREED CONFERENCE PROCEEDINGS	Equilibrium Imitation and Growth (with Christopher Tonetti) <i>Journal of Political Economy, 2014</i>	
	Catch-up and Fall-back through Innovation and Imitation (with Jess Benhabib and Christopher Tonetti) <i>Journal of Economic Growth, 2014</i>	
	Equilibrium Technology Diffusion, Trade, and Growth (with Christopher Tonetti and Michael Waugh) <i>American Economic Review, 2021</i>	
	Reconciling Models of Diffusion and Innovation: A Theory of the Productivity Distribution and Technology Frontier (with Jess Benhabib and Christopher Tonetti) <i>Econometrica, 2021</i>	
	Eigendecomposition of Tau Matrices and Applications (with Sven-Erik Ekstrom, Carlo Garoni, and Adam Jozefiak) <i>Linear Algebra and Its Applications, 2021</i>	
	Commitment and Investment Distortions Under Limited Liability (with Carolin Pflueger and Michal Szkup) <i>Journal of Economic Theory, 2024</i>	
	STEER-ME: Assessing the Microeconomic Reasoning of Large Language Models (with N. Raman, T. Lundy, T. Amin, J. Perla, K. Leyton-Brown) <i>Thirty-Ninth Annual Conference on Neural Information Processing Systems (NeurIPS), Datasets and Benchmarks Track, 2025.</i>	
WORKING PAPERS	A Theory of Dynamic Product Awareness and Targeted Advertising (with Larent Cavenaile, Murat Celik, and Pau Roldan-Blanco) <i>R&amp;R at the Journal of Political Economy</i>	

Differentiable State-Space Models and Hamiltonian Monte Carlo Estimation (with Rachel Childers, Jesus Fernández-Villaverde, Christopher Rackauckas, and Peifan Wu)

*R&R at the Journal of Econometrics*

Exploiting Symmetry in High-Dimensional Dynamic Programming (with Mahdi Ebrahimi Kahou, Jesus Fernández-Villaverde, and Arnav Sood)

*NBER Working Paper*

Spooky Boundaries at a Distance: Inductive Bias and Dynamic Macroeconomic Models (with Mahdi Ebrahimi Kahou, Jesus Fernández-Villaverde, Sebastian Gomez, and Jan Rosa)

*R&R at the Journal of Monetary Economics*

Solving Models of Economic Dynamics with Ridgeless Kernel Regressions (with Mahdi Ebrahimi Kahou and Geoff Pleiss)

*arXiv Working Paper*

Taming the Curse of Dimensionality: Quantitative Economics with Deep Learning (with Jesus Fernández-Villaverde and Galo Nuño)

*R&R at Quantitative Economics*

GRANTS AND AWARDS

Bank of Canada Governor's Award (2021-2022)

SSHRC Insight Grant (2023-2025), \$155,400

*Deep learning methods for solving high-dimensional equilibrium models*

SSHRC Insight Development Grant (co-applicant 2021-2022), \$58,635

*Monopsony or Peer Effects? Disentangling the Importance of Firms in the Labor Market*

SSHRC Insight Grant (2018-2021), \$159,183

*Coordination frictions in macro-development: spatial equilibrium, technology traps, and industrial policy*

SSHRC Insight Development Grant (2018-2020), \$68,834

*Debt Overhang and Over-Investment*

SSHRC Insight Development Grant (2015-2017), \$43,000

*Why Doesn't Technology Diffuse through Migration?*

Hampton Grant (2014-2015), \$22,000

*The Growth Dynamics of Innovation, Diffusion, and the Technology Frontier*

BOOKS

Quantitative Economics with Julia (with Thomas J. Sargent and John Stachurski)

Online textbook: <https://julia.quantecon.org/>

QuantEcon DataScience (with Chase Coleman, Spencer Lyon, and Collaborators)

Online textbook: <https://datascience.quantecon.org/>

SEMINARS,  
CONFERENCES,  
AND VISITING  
SCHOLAR

2025: HEC Montreal, UQAM, Banff Productivity, Innovation, and Economic Growth Conference

2024: ACM-EC Workshop Organizer, ACM International Conference on AI in Finance (ICAIF)Organizer

2023: Richmond Fed, Western, Future of AI and Economics at HBS

2022: Bank of Canada, Uppsala, Peking University

2021: AEA, Canadian Macro Study Group, Bank of Canada Fellowship Learning Exchange, Boston College, Queens, Georgetown, Boston University, UCL

2020: HEC Paris

2019: SED (Organizing Committee), NBER Summer Institute (discussant)

2018: University of Pennsylvania, University of Toronto Rotman, Yale (Cowles Visiting Scholar), SED (Organizing Committee)

2017: UCSD, Stanford, Philadelphia Fed, Minneapolis Fed (Visiting Scholar), WashU Mini-Conference on Macro-Development, Minnesota Macro Theory, St. Louis Fed

2016: Simon Fraser University

2015: UC Berkeley, University of Pennsylvania, University of Pennsylvania Wharton, Columbia University, AEA, Cowles Foundation (discussant), Nottingham University Conference on Firm and Technology Dynamics

2014: San Francisco Federal Reserve, Cowles Foundation (discussant)

2013: UCLA, UCSD, Minnesota

TEACHING  
EXPERIENCE

University of British Columbia, Vancouver, BC, Canada  
ECON526 - Quantitative Economics with Data Science Applications (masters)  
ECON622 - Computational Economics with Data Science Applications (PhD)  
Created course and moved to approval by the UBC Senate  
ECON323 - Quantitative Economic Modeling with Data Science Applications (undergraduate)  
Created course and moved to approval by the UBC Senate  
ECON302 - Intermediate Macroeconomics (undergraduate)  
ECON307 - Honors Intermediate Macroeconomics (undergraduate)  
ECON408 - Computational Methods in Macroeconomics (undergraduate)  
Created course and moved to approval by the UBC Senate  
ECON546 - Monetary Theory and Policy (graduate)

SERVICE

University of British Columbia, Vancouver, BC, Canada  
Chair, Graduate Committee  
Computer Lab Committee  
Comps Committee  
Executive Committee  
Instructor Recruitment Committee  
Recruitment Committee  
Bank of Canada Governor's Challenge (Undergrad Team won 1st Place)  
Centre for Innovative Data in Economics Research (CIDER) Board Member  
VSE Director Selection Committee  
Computer Science Recruitment Committee  
Advisory Committee of the SciML (<https://sciml.ai/>) organization

PHD STUDENT  
PLACEMENTS

University of British Columbia, Vancouver, BC, Canada  
Colin Caines, Committee Member (Placed at Federal Reserve Board)  
João Alfredo Galindo da Fonseca, Committee Member (Placed at Université de Montréal)  
Sev Hou, Advisor (Placed at Chinese University of Hong Kong, Shenzhen now SFU)  
Dongxiao Zhang, Committee Member (Placed at Veeva Systems)  
Nadhanael Gemaliel Vimala, Committee Member (Reserve Bank of India)  
Mahdi E. Kahou, Supervisor (Placed at Bowdoin College)  
Ali Karimrad, Committee Member (Placed at University of Washington)  
Alejandro Roja-bernal, Committee Member (Placed at University of Hawaii)  
Josh Catalan, Committee Member  
Jan Rosa, Committee Member (Placed at OECD)  
Giulia Lo Forte, Committee Member (Placed at Fed Board)  
Mila Markevych, Committee Member (Placed at UNC Charlotte)  
Neil Newman (Computer Science), Committee Member  
Betty Shea (Computer Science), Committee Member  
Narun Raman (Computer Science), Committee Member  
Taylor Lundy (Computer Science), Committee Member  
Talha Naeem, Committee Member

REFEREE

Econometrica, American Economic Review, Quarterly Journal of Economics, Journal of Political Economy, Review of Economic Studies, AEJ: Macro, Journal of Economic Growth, Journal of International Economics, International Economic Review, Review of Economic Dynamics, European Economic Review, Journal of Economic Theory, Theoretical Economics, Journal of Development Economics, Canadian Journal of Economics, Journal of Economic Literature, Macroeconomic Dynamics, Journal of Economic Behavior & Organization

OTHER  
EXPERIENCE

CTO/Founder/Director of Research/Software Engineer at technology firms (1995-2006)