

Jesse Perla

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 http://jesseperla.com https://github.com/jlperla/
CITIZENSHIP	Canadian, American	
INTERESTS	Macroeconomics, Machine Learning, Growth, Macro-Development, Bounded Rationality	
POSITIONS	Associate Professor, University of British Columbia Visiting Professor, UBC Computer Science (Fall 2021)	
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	
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	Equilibrium Imitation and Growth (with Christopher Tonetti) <i>Journal of Political Economy</i> , 2014 Catch-up and Fall-back through Innovation and Imitation (with Jess Benhabib and Christopher Tonetti) <i>Journal of Economic Growth</i> , 2014 Equilibrium Technology Diffusion, Trade, and Growth (with Christopher Tonetti and Michael Waugh) <i>American Economic Review</i> , 2021 Reconciling Models of Diffusion and Innovation: A Theory of the Productivity Distribution and Technology Frontier (with Jess Benhabib and Christopher Tonetti) <i>Econometrica</i> , 2021 Eigendecomposition of Tau Matrices and Applications (with Sven-Erik Ekstrom, Carlo Garoni, and Adam Jozefiak) <i>Linear Algebra and Its Applications</i> , 2021	
WORKING PAPERS	A Model of Product Awareness and Industry Life Cycles (with Larent Cavenaile, Murat Celik, and Pau Roldan-Blanco) <i>Working Paper, Revision Submitted</i> Exploiting Symmetry in High-Dimensional Dynamic Programming (with Mahdi Ebrahimi Kahou, Jesus Fernández-Villaverde, and Arnav Sood) <i>NBER Working Paper</i> Doubling Down on Debt: Limited Liability as a Financial Friction (with Carolin Pflueger and Michal Szkup) <i>NBER Working Paper</i> Differentiable State-Space Models and Hamiltonian Monte Carlo Estimation (with David Childers, Jesus Fernández-Villaverde, Christopher Rackauckas, and Peifan Wu) <i>R&R at Journal of Econometrics</i>	

Spooky Boundaries at a Distance: Exploring Transversality and Stability with Deep Learning (with Mahdi Ebrahimi Kahou, Jesus Fernández-Villaverde, Sebastian Gomez, and Jan Rosa)

Working Paper

WORKS IN PROGRESS

Technology Adoption and the The Big Pull (with Michael Peters)

Monopsony or Peer Effects? Disentangling the Importance of Firms in the Labor Market (with Christian Moser and Raffa Saggio)

Cowles Redux: Models and Data through the Prism of Machine Learning (with Jesus Fernández-Villaverde)

Solving Equilibrium Economic Models with Deep Learning (with Jesus Fernández-Villaverde and other collaborators)

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

2023: Richmond Fed (scheduled), Western (rescheduling)

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

ECON622 - Computational Economics with Data Science Applications (graduate)

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)
ECON407 - Topics in Macroeconomics (undergraduate)
ECON546 - Monetary Theory and Policy (graduate)

SERVICE

University of British Columbia, Vancouver, BC, Canada
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

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)
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)

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)