# Curriculum Vitae Mahdi Ebrahimi Kahou

Last Update: October 2022

# PERSONAL INFORMATION

Citizenship: Canadian, Iranian

Contact Info: mekahou@alumni.ubc.ca, Website.

## RESEARCH INTERESTS

Macroeconomics, Machine Learning, Econometrics, and Computational Economics.

### **EDUCATION**

- Doctor of Philosophy in Economics, University British Columbia.
   Committee: Dr. Jesse Perla (UBC), Dr. Jesús Fernández-Villaverde (UPenn),
   Dr. Hiroyuki Kasahara (UBC), Dr. Vadim Marmer (UBC)
  - Visiting scholar at Federal Reserve Bank of Minneapolis. October 2022
- Doctor of Philosophy in Economics, University of Minnesota. Voluntary withdrawal due to the U.S. travel ban after finishing the first year.
- Master of Science in Physics, Institute for Quantum Science and Technology, University of Calgary.

Thesis Topic: Spatial search via non-linear quantum walk Supervisor: Dr. David Feder

• Bachelor of Science in Physics, Sharif University of Technology.

### WORKING PAPERS

- "Spooky Boundaries at a Distance: Exploring Transversality and Stability with Deep Learning".
  - With Jesús Fernández-Villaverde, Sebastian Gomez Cardona, Jesse Perla, and Jan Rosa.
- "Exploiting Symmetry in High-Dimensional Dynamic Programming", NBER Working Paper, 2021.
  - With Jesús Fernández-Villaverde, Jesse Perla, and Arnav Sood
- "Optimal Entry Decision with Correlated Variable Cost and Output Price".

# WORK IN PROGRESS

• "Solving Equilibrium Economic Models with Deep Learning". With Jesús Fernández-Villaverde and Jesse Perla.

#### **PUBLICATIONS**

- "Quantum Search with Interacting Bose-Einstein Condensates", Physical Review A, 2013. (With David L. Feder)
- "Macroprudential Policy: A Review", Journal of Financial Stability, 2017. (With Alfred Lehar)

## SCHOLARSHIPS, AWARDS AND HONOURS

- Selected for 71st Lindau Nobel Laureate Meeting on Economic Sciences.
- SSHRC Doctoral Fellowship.
- Four Year Doctoral Fellowship (UBC).
- Faculty of Graduate Studies Award (University of Calgary).
- Institute for Quantum Science and Technology "Top-Up Students Award" (University of Calgary).
- Bronze medal in National Physics Olympiad.

## PRESENTATIONS

- University of Colorado Boulder, Scheduled for December 2022.
- University of Minnesota, Scheduled for October 2022.
- "Spooky Action at the Boundary: A Note on Transversality Condition and Stationarity". Society For Economic Dynamics, Madison, June 2022.
- "Spatial Search by Non-Linear Quantum Walk". Southwest Quantum Information and Technology, Albuquerque, February 2012.
- "Non-linear Quantum Walk". Canadian Association of Physicists, Calgary, June 2012.

#### References

• Dr. Jesse Perla

Associate Professor of Economics

University of British Columbia

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• Dr. Jesús Fernández-Villaverde

Professor of Economics
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University of Pennsylvania
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The Ronald O. Perelman Center for Political Science and Economics
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• Dr. Hiroyuki Kasahara

Professor of Economics Phone: +1 604 822-4814 University of British Columbia E-mail: Hiroyuki.Kasahara@ubc.ca 6000 Iona Drive, Vancouver, BC Canada V6T 1L4.

• Dr. Vadim Marmer

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# TEACHING EXPERIENCE

• TA for Computational Economics with Data Science Applications, UBC.	2019
• TA for Information and Incentive (graduate), UBC.	2019
• TA for PhD Econometrics Theory, UBC.	2018
• TA for honor level macroeconomics and microeconomics, UBC.	2019-2020
• TA Economic Growth, University of Minnesota.	2016
• TA for Phys 211/221, Phys 259 and Phys 369, University of Calgary.	2010-2012
• TA for Analytical Mechanics I&II, Sharif University of Technology.	2007-2008

# Computer Programming

 $\bullet\,$  Matlab, Mathematica, Julia, Python.