# Curriculum Vitae Mahdi Ebrahimi Kahou

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# 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. 2017-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

• "Exploiting Symmetry in High-Dimensional Dynamic Programming", NBER Working Paper, 2021.

With Jesús Fernández-Villaverde, Jesse Perla, and Arnav Sood.

• "Spooky Boundaries at a Distance: Exploring Transversality and Stability with Deep Learning".

With Jesús Fernández-Villaverde, Sebastian Gomez Cardona, Jesse Perla, and Jan Rosa

• "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.
- Social Sciences and Humanities Research Council (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

- 2023: University of Toronto, University of Calgary (Haskayne School of Business), Bowdoin College, Bates College, University of Waterloo, Western University, McGill, Bank of Canada, University of Missouri.
- 2022: Society For Economic Dynamics (Madison), University of Minnesota, University of Colorado Boulder.
- 2012: Southwest Quantum Information and Technology(Albuquerque), Canadian Association of Physicists (Calgary).

#### References

- Dr. Jesse Perla
   Associate Professor of Economics
   University of British Columbia
   Phone: +1 604 822-5721
   E-mail: jesse.perla@ubc.ca.
  - 6000 Iona Drive, Vancouver, BC Canada V6T 1L4.
- Dr. Jesús Fernández-Villaverde
   Professor of Economics
   Phone: +1 215 573-1504
   University of Pennsylvania
   E-mail: jesusfy@econ.upenn.edu
   The Ronald O. Perelman Center for Political Science and Economics
   133 South 36th Street, Philadelphia, PA 19104.
- Dr. Hiroyuki Kasahara
   Professor of Economics
   University of British Columbia
   6000 Iona Drive, Vancouver, BC Canada V6T 1L4.
- Dr. Vadim Marmer
   Professor of Economics
   University of British Columbia
   6000 Iona Drive, Vancouver, BC Canada V6T 1L4 .

# 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
$\bullet$ TA for Analytical Mechanics I&II, Sharif University of Technology.	2007-2008

# Computer Programming

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