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#### **Education**

Ph.D. Candidate in Economics, University of British Columbia, 2015 to present

Thesis Title: Learning and Subjective Expectation Formation: A Recurrent Neural Network Approach

M.S. University of Texas at Austin, 2015

M.A. Simon Fraser University, 2013

B.A. Fudan University, 2012

#### **Positions**

Assistant Professor, Chinese University of Hong Kong, Shenzhen

2021-

#### **Research Fields**

Primary fields: Macroeconomics, Monetary Economics, Applied Econometrics Secondary fields: Expectation Formation, Information Acquisition, Deep Learning

#### Job Market Paper

# Learning and Subjective Expectation Formation: A Recurrent Neural Network Approach

I propose a flexible non-parametric method using Recurrent Neural Networks (RNN) to estimate a generalized model of expectation formation. This approach does not rely on restrictive assumptions of functional forms and parametric methods yet nests the standard approaches of empirical studies on expectation formation. Applying this approach to data on macroeconomic expectations from the Michigan Survey of Consumers (MSC) and a rich set of signals available to U.S. households, I document three novel findings: (1) agents' expectations about the future economic condition have asymmetric and non-linear responses to signals; (2) agents' attentions shift from signals about the current state to signals about the future: they behave as adaptive learners in ordinary periods and become forward-looking as the state of economy gets worse; (3) the content of signals on economic conditions, rather than the amount of news coverage on these signals, plays the most important role in creating the attention-shift. Double Machine Learning approach is then used to obtain statistical inferences of these empirical findings. Finally, I show these stylized facts can be generated by a model with rational inattention, in which information endogenously becomes more valuable when economic status worsens.

**Presentation:** UBC Macro Seminar, UBC Econometrics Seminar, BoE "Modelling with Big Data & Machine Learning" Conference, SFU Seminar, PKU NSD Seminar(Scheduled), SED 2021(Scheduled)

## **Working Papers**

Monetary Policy when the Phillips Curve is Locally Quite Flat Joint with Paul Beaudry and Franck Portier, CEPR Discussion Papers No. DP15184, submitted

Uncovering Subjective Models from Survey Expectations

Convergence Across Castes Joint with Viktoria Hnatkovska and Amartya Lahiri

## **Work in Progress**

Learning pandemics: the informational content of testing (Joint with Davide Alonzo)

Bounded Rationality in Planning (Joint with Giovanni Gallipoli, Wei Li and Jesse Perla)

### **Teaching Experience**

University of British Columbia:

Econ 323	Quantitative Economic Modeling with Data Science Applications, 2020
Econ 502	Advanced Macroeconomics (Masters), 2017-2019
Econ 556	International Finance(Masters), 2019
Econ 546	Monetary Economics (Masters),2018
Econ 302	Intermediate Macroeconomic Analysis, 2017-2018
Econ 626	Econometrics Theory (PhD),2016

## Research Experience

2017-2020 Research Assistant for Professor Jesse Perla, Professor Paul Schrimpf

#### Honors, Scholarships and Fellowships

2017-2019	Li Tze Fong Memorial Fellowship, University of British Columbia
2015-2019	Four Year Fellowship, University of British Columbia
2016	Chuck Blackorby Prize, Vancouver School of Economics
2016	John Cragg Prize, Vancouver School of Economics
2013-2015	Department of Economics Fellowship, University of Texas at Austin
2012-2013	Departmental Fellowship, Simon Fraser University

#### **Certificates and Other Academic Activities**

Summer 2018 Tools for Macroeconomics Workshop (LSE)

Referee: Canadian Journal of Economics

## **Programming Skills**

STATA, Matlab, Python, TensorFlow, LATEX, Julia (Basic), R(Basic)

# References

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