

Haoyu Sheng

PHD STUDENT · ECONOMICS

✉ haoyu_sheng@brown.edu | 🌐 www.haoyusheng.net | 📱 hs97

Education

Brown University

PH.D STUDENT IN ECONOMICS

Providence, RI

2020 - Present

- COMPLETED COURSEWORK: MACRO-FINANCE: BEHAVIORAL AND RATIONAL, TOPICS IN MACRO AND MONETARY ECONOMICS, INDUSTRIAL ORGANIZATION
- CURRENT COURSEWORK: MACROECONOMIC SLACK, ADVANCED TOPICS IN APPLIED MACROECONOMICS, ECONOMIC GROWTH AND COMPARATIVE DEVELOPMENT

Williams College

B.A. IN COMPUTER SCIENCE AND ECONOMICS WITH HIGHEST HONORS

Williamstown, MA

2016 - 2020

- ADVISOR: PROFESSOR ASHOK RAI
- THESIS: THE CERTIFICATION GAME

Research Experience

- 2021-2022 Research Assistant for Professor Amy Handlan, Brown University
- Built audio deep learning models to classify gender, tone, and seniority for speakers in online economic seminars.
- 2021 Research Assistant for Professor Pascal Michailat, Brown University
- Built a policy tool that calculates optimal public expenditure under inefficient unemployment. It can be found [here](#).
- 2019-2020 Research Assistant for Professor David Y. Yang, Harvard University
- Analyzed the evolution of newspaper images in China by applying computer vision methods to webscraped newspaper PDF files.
- 2019 Research Assistant for Professor Kenneth Kuttner, Williams College
- Measured the effectiveness of macroprudential policies for 57 economies by calculating the portion of policy actions counter-cyclical to property prices and housing credit.

Teaching Experience

- Spring 2022 Machine Learning, Text Analysis, and Economics (Undergraduate), TA for Professor Handlan, Brown University
- Spring 2020 Game Theory (Undergraduate), TA for Professor Rai, Williams College
- Fall 2019 Global Macro Instability and Finance (Undergraduate), TA for Professor Phelan, Williams College
- Fall 2017, Intermediate Micro (Undergraduate), TA for Professors Rai and Sheppard, Williams College
- Spring 2019

Honors & Awards

- 2020 Graduate Fellowship, Brown University
- 2019 Carl Van Duyne Prize in Economics, Williams College
- 2018 Class of 1960 Scholar in Computer Science, Williams College
- 2018 Class of 1960 Scholar in Economics, Williams College

Work In Progress

- “Gender and Tone in Online Economics Presentations: Audio Analysis with Machine Learning,” with Amy Handlan and Emily Moschini
- “The Certification Game” (Undergraduate Thesis)
- Winner of the Carl Van Duyne Prize in Economics*

Other Publications

- “When Rooks Miss: Probability through Chess,” with Steven Miller and Daniel Turek

The College Mathematics Journal, 2021

“Assessing Post-hoc Explainability of the BKT Algorithm,” with Iris Howley and Tongyu Zhou

2020 AAAI/ACM Conference on AI, Ethics, and Society (AIES’20), 2020

“Knowledge Distillation for Recurrent Neural Network Language Modeling with Trust Regularization,” with Yangyang Shi, Mei-Yuh Hwang, and Xin Lei

ICASSP 2019 - 2019 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2019

Other Experience

Fall 2018 Computer Science Research Assistant for Professor Iris Howley, Williams College

Summer 2018 Research Intern, Mobvoi AI Lab

Summer 2017 Summer Quant Analyst, Hutchin Hill Capital

Skills

Languages Chinese, Cantonese

Programming Languages R (tidyverse), Python (pandas, nltk, tensorflow, and librosa), Stata, Java, JavaScript, C++, C