Zhouzhou Gu

Princeton University, JRRB A03 https://zzhougu.github.io

EDUCATION

Peking University

Beijing, China

B.S. in Physics, B.A. in Economics. GPA: 3.80 (overall), 3.91/4.0 (Major)

Sep. 2018 - June 2022

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Featured Courses: Analysis I&II, Function of Real Variables, Complex Analysis, PhD Stochastic Analysis, PhD Group Theory, Partial Differential Equations, Ordinary Differential Equations, Linear Algebra, Probability and Statistics, Numerical Analysis; PhD Macro Theory I&II (at Princeton), PhD Micro Theory I&II, PhD Econometrics I, PhD Macro-Finance & Monetary Economics & Macroeconomics With Agent Heterogeneity (at Princeton), PhD Corporate Finance Theory, PhD Contract Theory, Industrial Organization

CURRENT POSITION

Senior Research Specialist (Predoc), Bendheim Center for Finance, Princeton University

NJ, USA

Beijing, China

2020

Advisor: Prof. Jonathan E. Payne & Prof. Markus K. Brunnermeier.

Sep. 2022 - Present

Field: Macro-finance, Heterogeneous Agent, ESG, Machine learning.

RESEARCH INTEREST

Macro-finance, Macroeconomics, Heterogeneous Agent, Banking

RESEARCH PAPERS

• Deep Learning Solutions to Master Equations for Continuous Time Heterogeneous Agent Macroeconomic Models (with Jonathan E. Payne, Mathieu Lauriere and Sebastian Merkel).

Presentation: SED, SEC, Princeton, UC Berkeley, USC Marshall, IMSI.

Instructor and Developer for Junior Physics Lab, Peking University

Topic: Quantum Interference and Entanglement

- Deep Learning for Solving and Estimating Dynamic Macro-Finance Models (with Wenhao Li, Lu Lu, Benjamin Fan, Eddie Qiao and Anran Jiao). Submitted.
- Bank Opacity, Leverage Spirals and Optimal Regulation (with Haotian Xiang). Draft coming soon.

SELECTED RESEARCH EXPERIENCE

Marshall School of Business, University of Southern California	Remote
Research Assistant to Prof. Wenhao Li	June 2021 - June 2022
Department of Physics, Peking University	Beijing, China
Independent Research supervised by Prof. Xuzong Chen	Feb. 2020 - Oct. 2021
Honor Thesis: Essays on Ultra-cold Atom Physics and Dynamic Quantum Phase Transition	
SELECTED HONORS AND AWARDS	
First Prize in National Undergraduate Math Contest	2021
China Economics Research Scholarship	2021
• Benz Scholarship (Top 5%)	2021
• Merit Student (Top 5%)	2021, 2020
• Peking University First Prize Scholarship (Top 2%)	2020
Academic Excellent Award	2019
Gold Medal in 19th Asian Physics Olympiad	2018
• Gold Medal in 34th Chinese Physics Olympiad (selected to Chinese National Team) ADDITIONAL EXPERIENCE	2017
Teaching Assistant for Undergraduate Microeconomic Theory, Peking University Instructor: Prof. Xin Wang	Beijing, China Fall 2021

ADDITIONAL INFORMATION

• **Programming**. Python (Pytorch), R, C++, Matlab, LATEX, Julia, Stata

• Language. Chinese (native), English (fluent)

• **Test Scores**. TOEFL: 107 (Speaking 23), GRE: 326+4.5

REFERENCES

Prof. Markus K. Brunnermeier Prof. Jonathan E. Payne
Department of Economics Department of Economics
Princeton University Princeton University
New Jersey, 08544 New Jersey, 08544

Prof. Wenhao Li Prof. Haotian Xiang

Marshall School of Business Guanghua School of Management

University of Southern California Peking University
California, 90089 Beijing, 100871

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