Peilin Yang October 2020

School of Finance Nankai University peiliny@stanford.edu https://tteclinc.github.io/peilinyang//

Education

2021-2022	Predoctoral Research Fellow, Stanford University, Graduate School of Business
2017-2021	B.A. in Economics, Nankai University, School of Finance With Highest Honor in Economics Research

Publications

1. "Numerical solution and parameter estimation for uncertain SIR model with application to COVID-19 pandemic." With Xiaowei Chen, Jing Li, Chen Xiao. 2020. Fuzzy Optimization and Decision Making.

Working Papers

- 1. "Shock Response of Fully Funded System: HANK Framework." 2020. [link]
- 2. "Social Planner, Industrial Structure and Uncertainty for COVID-19." With Xiaowei Chen. 2020. Revise and Resubmit at SIAM Journal on Control and Optimization. [link]
- 3. "China's Policy Instruments: Tax Reduction, Retirement Prolonging and Welfare Changes." 2019. [link]

Research Experience

Princeton University, *Department of Economics* &. Stanford University, *Graduate School of Business*, Research Fellow, Adrien Matray and Chenzi Xu and, Nov. 2020 - Presented.

- Local Projection and SVAR

Harvard University, Department of Economics, Research Assistant to David Yang, Mar. 2020 - Presented.

- China's AI Companies (2020)
- Bureaucracy and Innovation (2020)
- China's Science Innovation (2021)

University of Illinois at Urbana-Champaign, Department of Mathematics, Research to Runhuan Feng, Sep. 2020 - Nov. 2020.

- Reinforcement Learning and High-Dimension Dynamics Programming

Morgan Stanley, Sales &. Trading Division, Quantitative Trader Internship, Jul. 2020 - Aug. 2020

Asian Development Bank, ADB TA PRC# 3148: China Pension Reform Project, Jul. 2019 - Oct. 2019.

WorldQuant, Independent researcher, Oct. 2018 - Sep. 2019.

- Machine Learning and NLP

Fellowships, Awards, and Honors

2018	Chinese Mathematical Modeling Competition Award I build a model about quantitative the attractive force of a city by using methods PCA and neural networks.
2018	China Undergraduate Mathematical Contest in Modeling Award I build a model about the heat transfer in different media. The main problem is about PDE numerical algorithm of finite difference.
2018	Chinese College Students Mathematics Competition Award Mathematical Analysis and algebra.
2018	American College Students Mathematical modeling competition Award I build a model about environmental costs. The main problem is about ODE dynamic system and continuous-time optimal control.

Teaching Experience

Nankai University	Graduate Advanced Macroeconomics I (TA, Spring 2019)
	Graduate Stochastic Analysis and Optimal Control Theory (TA, Spring 2020)

Presentations and Seminars

2020 Operations Research Society of China, Tsinghua University, Numerical solution to higher dimensional differential equations.

2019 Operations Research Society of China, Tsinghua University, Uncertainty CRRA Model and Risk Aversion.

2019 Summer Seminars of Computation and Economics, Shanghai University of Finance and Economics.

Computer Skills and language

Highly Proficient: Python (Data Processing, Plot, ArcGIS, Numerical Computation, Web Scraper), MATLAB, Stata, LaTex, R (ArcGIS, GeoDa), Julia, SQL

Familiar: ArcGIS, C++, GAUSS, HTML, Linux