

School of Finance  
Nankai University

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<https://tteclinc.github.io/peilinyang/>

## Education

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- 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

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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

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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

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

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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

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

### Teaching Experience

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

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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