

# Ziliang Shen

+86-15270239799 | [muxin19980125@163.com](mailto:muxin19980125@163.com) | <https://pinzek.github.io/>

Shanghai, China

## OBJECTIVE

I'm currently pursuing a Ph.D. in Statistics at Shanghai University of Finance and Economics. I am passionate about statistical and machine learning theories, particularly in field of **high-dimensional statistical learning**, **quantile regression**, **reinforcement Learning in financial**, and **distributed statistical inference**.

With a calm demeanor and a passion for tech innovation, I thrive on learning and applying new insights in my work.

## EDUCATION

- **Shanghai University of Finance and Economics** 2021.09 - Now  
PhD in Statistics Shanghai, China
- **Nanchang University** 2015.09 - 2019.06  
Bachelor in Mathematics and Applied Mathematics (Financial Mathematics) Nanchang, China

## EXPERIENCE

- **Turing Fund Managment** [🌐] 2025.03 - Now  
Reinforcement Learning Quantitative Research Shanghai, China
  - Developed a high-frequency stock trading execution model achieving a measurable reduction in execution slippage within a simulated Level 3 data environment.
  - Implemented DQN and PPO algorithms with hierarchical reinforcement learning, enhancing sample efficiency and overall strategy stability.
  - Conducted analysis on real market data, identifying delayed-reward patterns and key factors influencing model robustness.

## PROJECTS

- **Shanghai Electric Solar Cell Target Detection Project** 2024.05 - 2024.06  
Tools: *Faster R-CNN, PyTorch, Labeling Tools*
  - Led university team in collaboration with Shanghai Hongpu Information Technology, coordinating on-site work
  - Directed data labeling and iteratively optimized Faster R-CNN-based detection model to improve accuracy and efficiency
- **Shanghai GDP Nowcasting Project** 2024.06 - 2024.10  
Tools: *R, Python, Dynamic Factor Model, MF-BAVART, LSTM*
  - Developed multiple nowcasting models to address missing data and mixed-frequency issues, enabling real-time GDP growth rate estimation

## PUBLICATIONS

C=CONFERENCE, J=JOURNAL, S=IN SUBMISSION

- [C.1] Caixing Wang, Ziliang Shen. (2024). **Distributed high-dimensional quantile regression: estimation efficiency and support recovery**. In *International Conference on Machine Learning (ICML)*, Spotlight. [Code]
- [S.1] Caixing Wang, Ziliang Shen. **Distributed high-dimensional quantile regression: estimation efficiency and support recovery**. Manuscript submitted to *Journal of Machine Learning Research (JMLR)*.
- [S.2] Hanteng Ma, Ziliang Shen, Xingdong Feng, Xin Liu. **Sparsity learning via structured functional factor augmentation**. Manuscript submitted to *Statistica Sinica*.
- [S.3] Ziliang Shen, Caixing Wang, Shaoli Wang, Yibo Yan. **High-dimensional differentially private quantile regression: distributed estimation and statistical inference**. Manuscript submitted to *IEEE Transactions on Information Theory*.


## HONORS AND AWARDS

- **First-class Undergraduate Scholarship**  
Nanchang University
- **First-class Graduate Scholarship**  
Shanghai University of Finance and Economics
- **Excellent Student Award & Excellent Member of the Communist Youth League**  
Shanghai University of Finance and Economics
- **National Scholarship for Doctoral Students**  
Ministry of Education, China


ACTIVITIES

- **17th China R Conference & 2024 X Intelligence Conference**  
*Renmin University of China*
    - Participated in *New Statistical Methods I* session and engaged in academic exchange
  - **Shanghai Doctoral Forum on Statistics**  
*East China Normal University*
    - Awarded Second Prize for research presentation
  - **3rd National Conference on Statistics and Data Science**  
*Zhejiang University*
    - Presented research poster and exchanged ideas with peers


Jul 2024



Nov 2024



Jul 2025



PROFESSIONAL MEMBERSHIPS

- **IEEE student membership** 2025.07 - Present

REFERENCES

- Jianhua Chen**  
Counselor, Department of Mathematics and Computer Science  
Nanchang University  
Email: jianhuachen@ncu.edu.cn  
*Relationship: Undergraduate counsellor*
- Mei Zhuang**  
Deputy Secretary of the Party Committee  
School of Statistics and Data Science, Shanghai University of Finance and Economics  
Email: zhuangmm@mail.shufe.edu.cn  
*Relationship: Doctoral counsellor*
- Shaoli Wang**  
Associate Professor  
School of Statistics and Data Science, Shanghai University of Finance and Economics  
Email: swang@shufe.edu.cn  
*Relationship: advisor*