

CHENKAI WANG

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WORK EXPERIENCE

Southern University of Science and Technology, China	Sep. 2024 - Now
Research Assistant, Supervisor: Prof. Peng Yang	Department of Computer Science and Engineering

EDUCATION

Southern University of Science and Technology, China	Sep. 2022 - Jul. 2024
M.S. in Mathematics (with distinction)	GPA: 88.6/100
Supervisor: Prof. Peng Yang	Department of Statistics and Data Science
Southern University of Science and Technology, China	Sep. 2017 - Jul. 2022
B.S. in Statistics	GPA 3.03/4.00 (Last Year: 3.82/4.00, Last Semester: 3.91/4.00)
Supervisor: Prof. Yifang Ma	Department of Statistics and Data Science

PUBLICATIONS

Article (as the first author)

- **Chenkai Wang**, Junji Ren, and Peng Yang✉, “Alleviating Non-identifiability: a High-fidelity Calibration Objective for Financial Market Simulation with Multivariate Time Series Data,” *IEEE Transactions on Computational Social Systems*, pp. 1–13, 2025. DOI: 10.1109/TCSS.2025.3574236.

Articles (as a middle author)

- Xinyi Yuan, Zhiwei Shang, Zifan Wang, **Chenkai Wang**, Zhao Shan, Meixin Zhu✉, Chenjia Bai✉, and Xuelong Li, “Preference Aligned Diffusion Planner for Quadrupedal Locomotion Control,” *IEEE/RSJ International Conference on Intelligent Robots and Systems(IROS)*, 2025.
- Junjie Zhao, Chenxi Zhang, **Chenkai Wang**, and Peng Yang✉, “Learning from Expert Factors: Trajectory-level Reward Shaping for Formulaic Alpha Factors Mining,” *Submitted to IEEE Transactions on Signal Processing, Under Review*, 2025+.
- Peng Yang, Zhenhua Yang, Boquan Jiang, **Chenkai Wang**, Ke Tang✉, and Xin Yao, “Posterior Distribution-assisted Evolutionary Dynamic Optimization as an Online Calibrator for Complex Simulations,” *In Preparation*, 2025+.

HONORS AND AWARDS

Outstanding Graduates honor, SUSTech	2024
Outstanding Graduate Student, SUSTech	2024
Excellent Student Cadre, SUSTech	2023
National Encouragement Scholarship, SUSTech	2020, 2021
Provincial Second Prize in Chinese Mathematics Competitions, Chinese Mathematical Society	2021
Provincial Third Prize in Chinese Mathematics Competitions, Chinese Mathematical Society	2020

PROJECTS

Advanced Network Science Project and Homework

Sep. 2022 - Jan. 2024

Individual Homework and Project, Prof. Yanqing Hu

Shenzhen

- Designed, analyzed, and proved the manipulation of PageRank by spam farms [HW 1 & 2].
- Simulated greedy routing on Kleinberg Model to evaluate clustering exponent impact [HW 3].
- Analyzed component sizes, giant component dynamics, and phase transitions [HW 4].
- Proposed a three-community detection method using recursive spectral bisection [HW 5].
- Proved and verified delivery time bounds in constrained Kleinberg Model [Final Project].

INVITED TALKS

“High-Fidelity Calibration of Financial Market Simulation with Multivariate Time Series Data”

–UltraQuant Investment (Private Equity Fund, RMB ¥3B+ AUM), Shenzhen

June 25, 2025

TEACHING ASSISTANTS

Southern University of Science and Technology:

MA212: Probability and Statistics, 2023 Spring, rated excellent by the lecturer: Prof. Guoliang Tian

MA204: Mathematical Statistics, 2023 Spring, rated excellent by the lecturer: Prof. GABRIELLE JING

STA217: Introduction to Data Science, 2024 Fall, rated excellent by the lecturer: Yifang Ma

MISCELLANEOUS

Languages: English: Fluent, TOEFL (83) Chinese (Mandarin): Native

Computational Skills: Python, MATLAB, L^AT_EX.

Interests: Movies, Reading, Basketball, Running, Voluntary Activity (more than 80 hours).