JINGYAN ZHANG

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EDUCATION

University of Hong Kong   Sept 2022 - present
B.S. in Quantitative Finance and Mathematics   *GPA: 3.96/4.3*

University of North Carolina at Chapel Hill (HKU worldwide program)
B.S in Mathematics   Fall 2025 (predicted)

RESEARCH EXPERIENCE

Research Assistant   Apr 2025 - Present
Department of Data and System Engineering, *University of Hong Kong*   *Hong Kong*

- Analyzed and developed models for Hong Kong's healthcare system, leveraging stochastic optimization and machine learning techniques. Focused on optimizing inpatient ward allocation and reducing patient waiting times to enhance operational efficiency and resource management.
- Waiting time for charging Eletric Vehicle, using quening theory and equilibrium method to solve.
- Supervisor: Prof. Yong-Hong KUO, Prof. Candace A. Yano

Research Assistant   Aug 2024 - Present
Department of Innovation and Information Management, *University of Hong Kong*   *Hong Kong*

- Working on a paper about optimal abandonment and return, applying dynamic programming to derive solutions.
- Conducted research on solutions for second-order Hamilton-Jacobi-Bellman equations, contributing theoretical insights to optimal policy problems within the project, and used the finite difference method to numerically solve and visualize HJB equations.
- Developed mathematical proofs for tree construction (Dynamic Efficient Frontier) and convexity of the optimal control value function within the project, with derivations and visualizations created using LaTeX and MATLAB.
- Supervisor: Prof. Zhengli Wang

TEACHING EXPERIENCE

University of Hong Kong | *Teaching Assistant*

- COMP1117 Computer Programming, 2024-2025

AWARDS AND ACTIVITIES

Dean's Honours List 2022-2023
Dean's Honours List 2023-2024
Martin Scholarship 2024
World Asian Case Competition 2023 World's Best Case Winners (Silver Medal)

SKILLS

Software	Python, Matlab, LaTeX, VBA
Languages	Mandarin, English, Cantonese