## JINGYAN ZHANG

 $+852\ 94909973 \Leftrightarrow \text{Hong Kong}$ 

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#### **EDUCATION**

University of Hong Kong

Sept 2022 - present

B.S. in Quantitative Finance and Mathematics

University of North Carolina at Chapel Hill (HKU worldwide program)

B.S in Mathematics Fall 2025 (predicted)

#### RESEARCH INTEREST

My research interest lies in stochastic modeling and data-driven decision making. In my research, I use various techniques, including stochastic control theory, data-driven optimization and machine learning methods.

#### RESEARCH EXPERIENCE

Research Assistant

Jun 2025 - Present

Department of Data and System Engineering, University of Hong Kong

Hong Kong

- HKU Summer Research Programme, selected from 100 out of 4000 applicants.
- Supervisor: Prof. Yong-Hong, KUO

Research Assistant

Aug 2024 - Present

Department of Innovation and Information Management, University of Hong Kong

Hong Kong

- Conducted in-depth research on the solutions for second-order Hamilton-Jacobi-Bellman equations, providing 10-page section with theoretical insights that contributed to a broader understanding of optimal policy problems within the working paper. Additionally, utilized the finite difference method to numerically solve and plot HJB equations.
- Created mathematical proofs for tree construction (Dynamic Efficient Frontier) and convexity of optimal control value function within the working paper, resulting in a detailed 10-page section that included rigorous derivations and comprehensive visualizations using IATEX and MATLAB.
- Supervisor: Prof. Zhengli Wang

Research Assistant

Aug 2024

School of Computing and Data Science, University of Hong Kong

Hong Kong

- Applied machine learning to replicate probability and statistics problems, providing targeted recommendations.
- Quickly learned and innovated on existing statistical learning materials using relevant knowledge.
- Supervisor: Dr. Kam Pui, Wat

#### TEACHING EXPERIENCE

University of Hong Kong | Teaching Assistant

• COMP1117 Computer Programming, 2024-2025

### AWARDS AND ACTIVITIES

Dean's Honours List 2022-2023	Oct 2023
Dean's Honours List 2023-2024	$\mathrm{Jan}\ 2025$
Martin Scholarship $HK$1000$	Sep $2024$
World Asian Case Competition 2023 World's Best Case Winners (Silver Medal) \$1000	Jun 2023

# $\mathbf{SKILLS}$

 ${\bf Software}$ 

Python, Matlab, LATEX, STATA, Excel Quick Learner, Leadership Soft Skills Mandarin, English, Cantonese Languages