JINGYAN ZHANG

+852 94909973 ⋄ Hong Kong

u3597410@connect.hku.hk ⋄ [Home Page](#)

EDUCATION

University of Hong Kong — Sept 2022 – Present
B.S. in Quantitative Finance; double major in Mathematics — *GPA: 4.01/4.3*

University of North Carolina at Chapel Hill — Aug 2025 – Present
Exchange student

AREAS OF INTEREST

- **Applied Probability:** Stochastic Modeling, sequential decision-making
- **Transportation:** Urban mobility

RESEARCH EXPERIENCE

Research Intern (Supervisors: Prof. Yong-Hong Kuo & Prof. Candace Arai Yano) — Apr 2025 – Present
Summer Research Program, University of Hong Kong — *Hong Kong*

- Developed a spatio-temporal stochastic choice framework linking station selection with queue/service/cars dynamics and weekly usage cycles;
- Designed a multilogit-based algorithm to compute choice–waiting-time equilibrium; constructed a San Mateo regional case study to learn drivers' tradeoff between waiting time and cost for calibration and validation.

Research Assistant (Supervisor: Prof. Zhengli Wang) — Aug 2024 – Present
University of Hong Kong — *Hong Kong*

- Formulated an SIS model with periodic transmission via the HJB equation approach and Pontryagin's minimum principle approach;
- Implemented numerical solvers to obtain cost-minimizing policies and analyzed structural properties (e.g., switching lines) and obtained explicit characterizations in certain parameter regimes.

RESEARCH PROJECTS

Weekly EV Fast Charging Equilibrium Model — Ongoing Project
Co-researcher, advised by Y. H. Kuo, C. A. Yano

Time-Varying SIS Model — Ongoing Project
Co-researcher, advised by Z. Wang

OTHER ACADEMIC EXPERIENCE

Student Research Assistant (Supervisor: Dr. Kam Pui Wat) — Aug 2024
University of Hong Kong — *Hong Kong*

- Conducted machine learning and probabilistic analysis to evaluate the appropriateness and efficiency of pre-course probability problems and online learning platforms, providing recommendations to improve the teaching environment.

Teaching Assistant — Jan 2025 – May 2025
COMP1117 Computer Programming

- Led weekly tutorials on Python programming.

HONORS AND AWARDS

Reaching Out Award	2025
HKU Worldwide Undergraduate Student Exchange Scholarships	2025
HKU Summer Research Program Scholarship	2025
Martin Scholar	2024
Dean's Honours List	2022–23, 2023–24
World Asian Case Competition Silver Medal	2023

EXTRACURRICULAR ACTIVITIES

Member Aug 2024 – Present
St John's College, University of Hong Kong *Hong Kong*

- Men's table tennis team
- Student Helper – HKU Info Day for Undergraduate Admissions

SKILLS

Software	Python, MATLAB, LaTeX, Mathematica, QGIS
Languages	Mandarin (Native), English (Fluent), Cantonese (Intermediate)