

## EDUCATION

### Hong Kong Baptist University

Hong Kong SAR, China

B.S.S.C. (Hons.) in Sociology, Minor in Computer Science

2022–2026 (Anticipated)

- **Research Interest:** Computational Social Science, Large Language Model Agent, Social Simulation, Social Stratification, Social Networks
- **GPA:** cGPA: 3.60/4.0, Major GPA: 3.69/4.0, Minor GPA: 3.72/4.0  
(First Class Hons.: cGPA 3.4 or above)
- **Relevant Coursework:** Intro to Python and its Applications (A-) | Problem Solving Using Object Oriented Approach (A) | Calc., Prob., and Stat. for CS (A-) | Fundamental of Data Analysis and Management (A-) | Intro to AI and ML (A-) | Social Stat. (A) | Sociological Classical Theory (A) | Sociological Theory II Contemporary Approaches (A-) | Social Networks (A-)

## PUBLICATION

1. Zeng, Q., Zhao, R., Mao, J., Li, H., Xu, F., Li, Y. (2025). CrimeMind: Simulating urban crime with multi-modal LLM agents. *arXiv preprint arXiv:2506.05981*.
  - We proposed **CrimeMind**, a novel LLM-driven Agent-based modeling (ABM) framework for simulating urban crime within a multi-modal urban context
  - By applying theories from sociology and criminology into the agentic workflow of CrimeMind, the crime hotspot prediction and spatial distribution accuracy achieving up to a **24% improvement over the strongest baseline** of both traditional ABMs and deep learning baselines

## RESEARCH

## EXPERIENCES

### Research Intern | Future Intelligence Lab, Tsinghua University

2025.03 – Present

- Supervised by **Prof. Fengli Xu**, Assistant Professor, Department of Electronic Engineering, Tsinghua University
- *Interdisciplinary Research:* Co-designed LLM Agents incorporating sociological theories to simulate and analyze human mobility, social segregation, and crime patterns, exploring underlying social behavior mechanisms. Contributed to experimental work and co-authorship of a resulting research paper

### Research Assistant | Department of Sociology, Hong Kong Baptist University

2024.03 – 2024.12

- Supervised by **Prof. Yinni Peng**, Associate Professor, Department of Sociology, Hong Kong Baptist University
- *Project:* Study of Return Migration of Overseas Chinese Students (HKBU 12600620)
- *Qualitative Research:* Conducted qualitative data collection through fieldwork observations and literature review, organizing and analyzing findings to support sociological research
- *Computational Social Science Research:* Developed custom Python scripts utilizing web scraping and NLP sentiment analysis techniques to acquire and process data for sociological research problems

### Research Assistant | Department of Sociology, Hong Kong Baptist University

2024.03 – 2024.06

- Supervised by **Prof. Jin Jiang**, Associate Professor, Department of Sociology, Hong Kong Baptist University
- *Project:* Staying in the Nest? A Study of Young Adults' Co-residence with Parents in the United Kingdom, Mainland China and Hong Kong
- *Quantitative Research:* Conducted quantitative analysis of survey on youth living arrangements, identifying key variables through literature synthesis and data organization
- Investigated socioeconomic drivers (economic resources, cultural values, life-course factors, etc.) shaping residential decision-making in young adults

SELECTED PROJECT	<p><b>Term Paper on How Unequal in Social Capital Fuels Higher Education Opportunity Inequality in China</b></p> <p><i>Course:</i> SOCI 4035, <i>Instructor:</i> Prof. Jin Jiang, <i>Term:</i> 25 Spring 2025.3</p> <ul style="list-style-type: none"> <li>• <b>Quantitatively investigated</b> stratifying effects of cultural capital (paternal education, leadership capital) on higher education access inequality, leveraging nationally representative <b>CFPS 2020 data</b> through <b>ordinal logistic regression modeling</b></li> <li>• <b>Proposed evidence-based policy interventions</b> targeting institutional barriers perpetuating educational disparities</li> </ul>
AWARDS AND HONORS	<ul style="list-style-type: none"> <li>• <b>President's Honor Roll</b>, Hong Kong Baptist University Semester 1, 2022–2023; Semester 1&amp;2, 2023–2024; Semester 1, 2024–2025</li> <li>• <b>Dean's List</b>, Hong Kong Baptist University Semester 2, 2022–2023</li> <li>• <b>HKSAR Government Talent Development Scholarship</b>, HK\$10,000 2023.06</li> </ul>
SKILLS AND INTERESTS	<ul style="list-style-type: none"> <li>• <b>Languages:</b> Chinese Mandarin (Native), Chinese Cantonese (Listening), English (Working Language), <math>\text{\LaTeX}</math></li> <li>• <b>Programming &amp; Software:</b> Python, Java, C, SQLite, MATLAB, Stata, SPSS, Microsoft Office</li> <li>• <b>Interests:</b> <ul style="list-style-type: none"> <li>– <b>Chinese Writing:</b> won the <i>First Prize</i> of the 24th National New Concept Writing Contest</li> <li>– <b>Hiking:</b> I am deeply impressed by the <i>MacLehose Trail</i> of Hong Kong</li> </ul> </li> </ul>