SUN Yingao, Rick

Telephone: +852 46830750 | E-mail: aoyingsun@outlook.com
Homepage: https://sunyingao.github.io

EDUCATION

Hong Kong University of Science and Technology (HKUST)

Bachelor of Science in Quantitative Social Analysis   *September 2021 – June 2025*

> **Degree Classification**: Second Class Honors, Division I

> **Core Module**: Quantitative Data Analysis for Social Research I & II & III, Applied Statistics, Research Methods in the Social Sciences (A+), Experiments and Quasi-Experiments in the Social Sciences (A+), Computational Social Science, Application of Geographical Information Systems, Data Mining for Business Analytics, Capstone Project (DI)

> **Honor**: HKSAR Government Scholarship Fund - Talent Development Scholarship, University Scholarship (Admissions Scholarship)

RESEARCH EXPERIENCE

Division of Social Science, HKUST

Research Assistant   *February 2025 – May 2025*

- Conducted manual cross-referencing to match 100 1999 Columbine High School yearbook entries with Colorado voter records, using Ancestry.com data, digitized rosters, and raw voter files
- Examined voter participation among Columbine-associated individuals to explore long-term demographic impacts of the 1999 shooting
- Contributed to data analysis and quality control for Prof. David Hendry: logged searches, archived key records, and reviewed 20% of matches to resolve biases

Student Helper   *November 2022 – February 2023*

- Conducted sentiment analysis for 2000 Weibo posts related to various social and political events, utilizing both qualitative and quantitative methods
- Participated on the research team of Prof. Zhang Dong to assess public sentiment and engagement on social media platforms, contributing to a comprehensive understanding of societal trends
- Engaged with community stakeholders to gather qualitative insights, enriching the research with diverse perspectives

Research Assistant   *February 2022 – June 2022*

- Initiated and completed data collection, integration, and analysis for the dataset consisting of 293 samples about the Changjiang Scholars Program
- Utilized Excel and Python to collect, clean, analyze and visualize the dataset
- Assisted Prof. David Zweig and fellow researchers to develop research methodologies and present findings

CONFERENCE PRESENTATION

SUN Yingao. 2024. Invited presenter at the 2024 Joint East Asian Studies Conference, Preston, UK, June 26-28

SUN Yingao. 2023. "A Quantitative Research of Talent-related Public Policies in Hong Kong during the COVID-19 Pandemic." Paper presented at the 8th Annual AP-PPN (Asia Pacific Public Policy Network) Conference 2023, Hong Kong, June 1-2

DISSERTATION

In-Depth Analysis of the Substitution Rates of GPT for Different Chinese Occupations
Undergraduate Dissertation from the Capstone Project

- Tasks within occupations were scored for AI substitution by GPT model (0-5 scale). Occupational substitution rates, weighted via O*NET (mapped to Chinese roles), varied. No link to current salaries, while strong positive correlation with salary growth (regression coefficient: 0.638, $p<0.01$)

PAPER UNDER REVIEW

SUN Yingao. "Political Significance of the Church of the Nativity in Anqing: A Place Attachment Analysis in the Context of Community Governance in Landlocked China." Submitted to *China Quarterly*, December 2024

INDUSTRY EXPERIENCE

Guangzhou Vision Investment Management Company

Internet Data Analyst Intern   *July 2024 – June 2025*

- Employed Non-negative Matrix Factorization (NMF) to conduct an in-depth analysis of viewership data for China-related content on YouTube, providing robust data support for content creation and operational strategies
- Identified top-performing content categories related to China, leading to an increase in viewership by 17.86%
- Monitored real-time updates of YouTube's algorithm and industry trends, conducted regular algorithm research and competitor analysis to ensure data analysis aligns with the platform's dynamic landscape

UniGreen Eats, HKUST

Volunteer   *September 2022 – May 2025*

- Led the planning and execution of campus activities themed on organic agriculture, enhancing the community's awareness and participation in sustainable agricultural practices through interactive experiences
- Conducted social studies on organic agriculture practices, completed a multi-dimensional data analysis report, and provided empirical support for project optimization

Shangyi Biological Co., Ltd

Market Analyst Intern   *July 2022 – August 2022*

- Conducted comprehensive analysis of upstream market data using Principal Component Analysis (PCA), excavating underlying market trends for corporate strategic decision-making
- Analyzed market trends and formulated cost optimization strategies, negotiating with suppliers to optimize supply chain costs, and achieved a 2.17% improvement in procurement efficiency within 2 months
- Participated in core corporate projects actively during internship, proposed innovative suggestions, and was awarded "Best Intern" in the final evaluation

SKILL

Software: Python (Advanced), ArcGIS (Advanced), R (Advanced), LaTeX(Advanced), MATLAB (Intermediate), Stata (Basic), SQL (Basic) and SPSS (Basic)

Quantitative Skill: Statistical Model, Text Analysis, Social Network Analysis, Machine Learning

Language: Mandarin (Native with Certificate in Putonghua Proficiency Test of First Class Lower), English (Fluent), Cantonese (Conversational) and German (Basic)