

Jerry ZUO

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EDUCATION

School of Economics and Management, Tsinghua University, Beijing

Aug 2022-Present

- Major in Information Management and Information Systems
- Overall GPA: 3.90/4.00; Major GPA: 3.95/4.00; Rank: 1/31
- Ranked 1 out of 15709 in the 2022 National College Entrance Exam to enter Tsinghua
- Awards: Comprehensive Merit Scholarship(top 5%), Sports Personality of the Year 2023(1 among over 200)
- Coursework: Data Structure and Algorithm, Machine Learning, Java Programming, Practice of Data Collection and Processing for Business, Principles of Computer Systems and Networks, Principle and Application of Databases, Probability Theory and Mathematical Statistics, Econometrics, Operation Research, Dynamic Systems Analysis and Control

Center for Statistical Science, Tsinghua University, Beijing

Aug 2023-Present

- Minor in Statistical Science
- Coursework: Linear Regression Analysis, Multivariate Statistical Analysis(on going)

RESEARCH EXPERIENCE

Combining Remote Sensing Data and Streetscape Data to Assess the Impact of Business Determinants on Cognitive Functioning | *Independent Research Project*

Feb 2024-Present

Advisor: John.S Ji, Associate Professor, Vanke School of Public Health, Tsinghua University

- Collecting remote sensing data using Google Earth Engine and commercial business data in the Beijing urban area through business map platform
- Using artificial intelligence techniques such as deep learning to recognize, frame and segment multiple scene elements contained in the streetscape data, such as commercial density, in order to quantify the impact of the city's commercial conditions on residents' cognitive function decline
- Using optimization methods to explore the optimal combination of environmental indicators for the cognitive health of population

Urban Green Space and Mortality in Chinese 390 Cities from 2000 to 2020: Health Impact Study | *Research*

Dec 2023-Feb 2024

Advisor: John.S Ji, Associate Professor, Vanke School of Public Health, Tsinghua University

- Mapped urban human population distribution aged 20 and above with a 1 km grid (30 arc-second) and used satellite-based remote sensing to measure green space over time to create population-weighted NDVI
- Calculated premature deaths attributed to NDVI changes and heat exposure, and interaction of and urban green space from 2000 to 2020 over time, based on counterfactual scenarios
- Concluded that the decrease in urban NDVI from 2000 to 2010 could have caused 9,951 additional premature deaths annually (95% CI: 3,346 – 18,106), while the increase in NDVI from 2010 to 2020 could have averted an estimated 37,653 premature deaths annually (95% CI: 26,327 – 60,135), with the highest averted mortality rate observed in the northern regions of the country compared to the southern regions

Impact Analysis of Social Networks under Natural Disaster | *Mentored Project*

Oct 2023-Dec 2024

Advisor: Jia-Rui Lin, Associate Professor, Disaster Prevention and Mitigation Institute, Tsinghua University

- Crawled microblogging data(containing over 30000 tweets) about '7.20 Zhengzhou Extrordinary Rainstorm' based on keywords using BeautifulSoup against multiple anti-crawler mechanisms
- Performed feature engineering, user classification, and microblog classification on the dataset, on the basis of which an ANN prediction model is built
- Built model-based web pages to visualize the model functionality using Python-streamlit

LEADERSHIP AND EXTRACURRICULAR EXPERIENCE

Sports Department of Tsinghua SEM | Minister

May 2023-May 2024

- Designed and organized sports events according to the needs of students
- Responsible for part of the financial work of the sports department
- Cooperated with the other departments of the Students' Union, jointly responsible for enhancing school's sports

Business Case Analysis Competition | Team Leader

Sep 2022-Oct 2022

- Led a team of 3 to analyze the operation strategy of lululemon and figuring out potential market opportunities
- Ranked 3rd in the final competition among 30 teams

SKILLS AND HOBBIES

- Programming: Solid expertise in Python(>100K lines), C, Java; Experienced in R, STATA, SQL; Familiar with HTML, CSS, Javascript(especially on Google Earth Engine)
- Language: English(fluent), Chinese(native)
- Hobby: Basketball(played on school team), Mountain Climbing, Guitar