Pu ZHANG

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Email: pzhang012@connect.hkust-gz.edu.cn **HomePage** pzhang.cn **Location**: Guangzhou, China

Research Interests

Social Media Research, Computational Social Science, Disaster Risk Perception, LLM for Social Science, LLM for Agent-based Simulation

Education

The Hong Kong University of Science and Technology (Guangzhou) Guangzhou, China

Red Bird Mphil in Innovation, Policy and Entrepreneurship

Supervisor: Assistant Professor Corey Kewei XU — Sep 2023 – Jun 2025

Co-Supervisor: Assistant Professor Jing TANG — Sep 2023 – Jun 2025

China Agricultural University Beijing, China

BA in Regional Development in Rural Areas — *GPA: 3.51/4.0*

Supervisor: Associate Professor Feng KONG — Sep 2019 – Jun 2023

BA in Data Science and Big Data Technology — *GPA: 3.47/4.0*

Mentors: Director Hui Li — Sep 2021 – Jun 2023

Publications

Pu ZHANG, Hao ZHANG, Feng KONG*. Study on the Evolution of Online Public Opinion and Government Response Strategies for the "7-20" extraordinary rainstorm and flooding disaster in Zhengzhou, China. *Natural Hazards*, **Pending publication**, **(SCI Q2, IF: 3.7)**

Pu ZHANG, Corey Kewei XU*. How effective is the Shorts Transformation of Traditional Media? An analysis from the perspective of user-generated content. *ChineseCSCW 2024*, **In Press**, **(EI Conference)**

Pu ZHANG, Hao ZHANG, and Feng KONG*. Research on online public opinion in the investigation of the "7–20" extraordinary rainstorm and flooding disaster in Zhengzhou, China. *International Journal of Disaster Risk Reduction*, 105 (2024): 104422. doi.org/10.1016/j.ijdrr.2024.104422 **(SCI Q1, IF: 5.0)**

Pu ZHANG, Hao ZHANG, and Feng KONG*, Yulong KONG. A study on public opinion characteristics of rainstorm flooding disasters based on Sina Weibo data: take the three rainstorm flooding disasters in China in 2021 as an example. *Water Resources And Hydropow Erengineering*, 54.02(2023): 47-59. doi:10.13928/j.cnki.wrahe.2023.02.005. **(In Chinese)**

Workshop

Tsinghua Big Data and Causal Inference Seminar Oct 2023 – Jan 2024

The workshop systematically explains a range of computational social science research methods, including text analysis, social network analysis, and double-differencing. It is organized by the Laboratory of Computational Social Science and National Governance of Tsinghua University.

Research Experience

Research on Internet Public Opinion of Emergency Events Based on Natural Language Processing

Supervisor: Professor Feng KONG — Sep 2022 – Present

Using Python based crawler software to collect social media data from Sina Weibo platform, using Bert fine-tuning model for sentiment analysis, visualization. For thematic task, I Use Gephi for social networking analysis and visualization, then make an assessment of public opinion features and governance recommendations.

Enhancing Urban Resilience through AI: Modeling, Simulating, and Mitigating Catastrophic Risk Scenarios

Supervisors: Professor Corey Xu and Jing TANG — Sep 2023 – Present

Relying on social media data, I will use large language models to perform sentiment analysis and theme analysis tasks to assess the risk perception of people in major sudden natural disaster scenarios related online public opinion characteristics. On this basis, a questionnaire is designed to collect basic personal information and disaster risk perception from the public, and then a large language model is used to empower the intelligentsia to simulate the risk perception characteristics of the general public in specific disaster situations, in order to deeply understand the risk perception differences between different social groups in different disaster scenarios.

Selected Honors and Scholarships

National Inspiration Scholarship	2022
China Telecom Scholarship	2021
Beijing Challenge Cup Second Prize	2022
Red Bird MPhil Postgraduate Scholarship	2023-2025

Skills

Python, R, LaTeX, Gephi, VosViewer

Languages

Chinese Mandarin (native), English (TOEFL 106, July 2022)