## 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)

B.Mgt in Regional Development in Rural Areas

B.Sc. in Data Science and Big Data Technology

Supervisor: Associate Professor Feng KONG

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 *GPA*: 3.51/4.0 Sep 2019 – Jun 2023 *GPA*: 3.47/4.0 Sep 2021 – Jun 2023

Mentors: Director Hui Li

**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*, doi.org/10.1007/s11069-024-06904-7, (**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)

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

Workshop

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.

#### The International GeoInformatics Summer School

Jun 2024

Participated in the IGSS 2024 Social Computing Summer School at Wuhan University.

**ICSC 2024 International Conference on Social Computing** Aug 2024 Poster showing at the 2024 International Conference on Social Computing.

#### 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.

### **Teaching Experience**

## **Teaching Assistant, IPE Thrust, Society Hub, HKUST (GZ)** Fall 2024

IPEN 5250: Text Analysis and Machine learning

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 Languages Python, R, LaTeX, Gephi, Arc GIS, VosViewer

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