

## Chuyao (Julian) WANG

C.Wang85@lse.ac.uk    www.lse.ac.uk/Methodology/People/Research-Students/Chuyao-Wang

Human-Computer Interaction; Artificial Intelligence and Society; Computational Social Science; Public Opinion

### Education

#### **London School of Economics and Political Science (LSE)**

**Ph.D. in Social Research Methods (Computational and Experimental Social Science)** 09/2022 – 07/2026

Supervisors: Prof. Patrick Sturgis F.B.A. (Survey Expert), Dr. Daniel De Kadt (Social Data Scientist)

Award: LSE Ph.D. Studentship £170,000

Training: Python Programming, Data Management with R, Artificial Intelligence

#### **Hong Kong University of Science and Technology (HKUST)**

**M.Phil. in Social Science (Social Statistics), GPA 3.74 / 4.3**

09/2020 – 06/2022

Supervisor: Dr. Han Zhang (Computational Social Scientist)

Award: Postgraduate Studentship HK\$430,000

Training: Computational Social Science, Research Design, Social Network Analysis, Econometrics

**M.Sc. in Global China Studies, GPA 3.96 / 4.3 (Top 3)**

09/2019 – 06/2020

Training: Statistical Inference, Comparative Politics, Social Stratification

#### **Shandong University (SDU)**

**B.A. in History, GPA 88.2 / 100**

09/2016 – 06/2020

Exchanges: University of California, Los Angeles (GPA 4.00 / 4), University of Hong Kong (GPA 3.70 / 4.3)

### Under Review

**Diverse Governance Strategies to Conspiracy Theories and Their Consequences in China** Under Review

- Submitted to **Nature's Humanities and Social Sciences Communications** (as the corresponding author)
- Analyzed 46,387 posts with computational network analysis, topic modeling, and studied three cases
- Revealed diverse backlash effects when the conspiracy theories were employed to mobilize the public
- Highlighted the limitations of authoritarianism, revealing the interplay between state control and public agency

### Working Papers

**Enhancing Public Deliberation with Generative AI Using Conversational Survey Experiments** In Progress

- Led as the 1st Author; explored how dialogues with ChatGPT enhance public deliberation on the carbon tax
- Devised questions from the literature, combined machine learning, and a digital survey experiment
- Conditionally accepted to a political communication journal in the Social Science Citation Index (Q2)

**How to Apply AI to Persuade People for Social Good: Evidence from a Survey Experiment** In Progress

- Led as the 1st Author; examined how generative AI helps to publicize public policies for social good
- Designed and conducted a 2×2 digital survey experiment among a nationally representative sample of 2,000

**400,000 News Images Shows that Ideological Hostility Intensifies with Public Crisis** Under Revision

- Led as the 1st Author; studied the ideological hostility of mass media under COVID-19 and beyond
- Framed questions, analyzed 400,000 images with machine learning, and conducted regression analyses
- Found that ideological hostility in visual depiction did exist but could be mitigated by the COVID-19 severity
- Presented at the 4th Summer Institute in Computational Social Science initiated by Princeton University

### Conference Presentations

**Presenter, 19th Chinese Internet Research Conference, Hong Kong**

09/2022

- Presented my working paper and data analysis with Dr. Weiyu ZHANG "Cross-platform Practices of Netreds"

**Participant, 4th Summer Institute in Computational Social Science (SICSS), Princeton University**

06/2021

- Presented my working paper "0.4 Million Images Shows that Ideological Hostility Can Be Eased in Crisis"
- Presented my research project "How Visual Misinformation Stimulates Political Polarization over Vaccine"

**Presenter, 7th International Symposium on Quantitative History, Society of Quantitative History** 07/2019

- Presented my working paper "Fiscal Mobilization in Modern China: A Quantitative Estimation"

## Research Experiences

**Research Intern, CivicTech Lab, Dept. of Communications and New Media, NUS** 08/2021 – 08/2022

- Conducted content analysis in a coauthored paper on civic technology submitted to *ACM Computing Surveys*
- Explored research questions, collected data using automated methods, and assisted in research design

**Project Leader and Principal Investigator, SICSS** 06/2021 – 06/2022

- Led the collaborative project "How Visual Misinformation Stimulates Political Polarization over Vaccine"
- Devised questions, conducted visual sentiment analysis, and revised the draft with feedback
- Received a Research Grant from the Social Science Research Council (SSRC) as the Principal Investigator

**Research Assistant, Dept. of Communication, University of California, Davis** 11/2021 – 06/2022

- Researched visual and textual memes and conspiracy theories during and beyond COVID-19
- Devised and optimized automated methods to investigate 1,200,000 visual and textual data

**Research Intern, Dept. of Global CBP, ByteDance Ltd.** 06/2020 – 09/2020

- Devised standardized questionnaire with Radford / Levels, undertook consultancy programs on compensation
- Implement Menta to clear data, analyze data with functions, and visualize data-driven insights for peer reviews

## Selected Grants and Honors

Under Review: LSE Research and Impact Support Fund, London School of Economics and Political Science (LSE)

Project: Enhancing Public Deliberation with Generative AI (as the only Principal Investigator) 04/2024

Scholarships and Grants Received: **US\$ 1,050,000** = £ 858,000 = HK\$ 8,210,000

LSE Ph.D. Studentship £ 170,000, LSE 2022-26

Hong Kong Ph.D. Fellowship HK\$ 1,010,000, Research Grant Council (Declined) 2022-25

Vice-Chancellor's Ph.D. Scholarship HK\$ 80,000, Chinese University of Hong Kong (CUHK, Declined) 2022-26

CUHK Computational Social Science Ph.D. Fellowship HK\$ 210,000, CUHK (Declined) 2022-26

Ph.D. Assistantship US\$ 96,500, University of Illinois Urbana-Champaign (Declined) 2022-27

NTU Research Scholarship S\$ 117,600, Nanyang Technological University (Declined) 2022-26

SICSS Research Grant, Social Science Research Council, USA (as the only Principal Investigator) 09/2021

Dean's Award (3 Places, Top 5%), Hong Kong University of Science and Technology (HKUST) 11/2020

Postgraduate Studentship HK\$ 430,000, HKUST 2020-22

## Service

Teaching: MY464 - Introduction to Quantitative Analysis for Media and Communications (LSE Graduate)

SOSC1470 - Political and Economic Development of Modern Japan (HKUST Undergraduate, Twice)

SOSC1190 - China and the World (HKUST Undergraduate, Twice)

Reviewing: Nature's *Humanities and Social Sciences Communications* [IF: 3.5]

74th Annual International Communication Association Conference (ICA 2024), with Divisions:

Communication & Technology, Human-Machine Communication, Visual Communication Studies

## Methods and Skills

Research Methods: Machine Learning, Survey Experiment, Regression, Econometrics, Network Modeling

Programming and Software: R, Python, Cloud Computing (e.g., OpenAI, Google Vision), Gephi, STATA

Language: English (Advanced, IELTS 8.0, C1), Chinese (Native)