Chufan Huang

Zürich, Switzerland • (+41) 782506586 • chufan.huang@uzh.ch • LinkedIn

Prospective PhD student in computational social science, focusing on networked misinformation, human-AI interaction, and visual media.

Education

2024.09 – 2026 ETH Zurich, Zurich, Switzerland

Social Network Lab (Special Student)

Graduate-level courses in network modeling and intervention research

- Network Modeling: ERGMs, SAOMs, simulation of misinformation spread
- *PhD Seminar Humans and Social Networks in the Digital Age*: networked virality, emotional contagion, cultural diffusion
- Final paper: Network-based intervention model for well-being and misinformation

2023.09 – 2026.06 University of Zurich, Zurich, Switzerland

Department of Communication and Media Research (IKMZ)

M.A. in Internet & Society (Research-based)

Research focus: generative AI, misinformation, algorithmic persuasion, and literacy interventions

Master's Thesis: From Peaks to Trajectories: Long-Term Evolution of Science-Related

Conspiracy Theories on Twitter (in progress, expected June 2026)

2019.09 – 2021.06 Sichuan International Studies University, Chongqing, China

School of Journalism and Communication *M.A. in Journalism and Communication*

Focus: media philosophy, platform studies, qualitative research

Thesis: Research on the Study Mediatization in the Digital Age — Based on the

Investigation of the 'Timing' Learning Community

2014.09 – 2018.06 Chongqing University of Arts and Sciences, Chongqing, China

School of Economics and Management

BBA in Business Administration

Publications and Working Papers

Huang, C., Liberatore, T., Garzonio, E. (2025).

Lost in Translation? Exploring Language and Cultural Representation in AI-Generated Political Portraits.

Conference on Ethics and Aesthetics of Artificial Images (EA-AI 2025). [presented]

Summary: Proposed a framework for analyzing how multilingual prompts and cultural cues influence AI-generated political portraits, highlighting the role of model-specific affordances and training data in shaping visual accuracy and symbolic encoding.

Huang, C. (2025).

Hidden Chilling Effects: How Indirect Senses of Dataveillance Shape Social Media Behavior.(In preparation) Summary: Introduces the concept of "social chilling" based on semi-structured interviews (N=8), analyzing how users anticipate and respond to platform surveillance. Uses thematic coding to explore emotional and coping strategies under data-driven visibility regimes.

^{*}As a regularly enrolled student at the University of Zurich (UZH), I participated in ETH Zurich courses related to my studies and completed the corresponding performance assessments as part of the joint academic collaboration between UZH and ETH.

Research Experience

Legend: [A] Networked Misinformation & Attention [B] Human–AI Interaction, Trust & Interventions [C] Visual & Multimodal Politics [D] Theory, STS & Surveillance [E] Methods & Measurement

2025.08 - 2026.06

From Peaks to Trajectories: Long-Term Evolution of Science-related Conspiracy Theories on Twitter [A][E]

Master's Thesis, University of Zurich — Supervisor: Prof. Mike S. Schäfer

- Longitudinal dataset of 111,000+ tweets (2011–2018) to characterize temporal attention patterns.
- Constructed a domain-specific dictionary to detect conspiracy clusters (e.g., anti-vax, climate denial).
- Identify single-peak, cyclical, and compound narrative life cycles.
- Planned analyses: time-series event coupling (cross-correlation; Granger causality) to test links between conspiracy salience and policy/scientific triggers.
- Compare classic linear models (e.g., Issue Attention Cycle) with observed non-linear trajectories to refine theories of digital attention.

2025.02 - 2025.06

Insights into User Engagement with ChatGPT [B][E]

Research Seminar: AI's Impact on Digital Information Societies, University of Zurich — Grade: 5.5/6 (9 ECTS)

- Analyzed 2,600+ prompts from 589 donated ChatGPT conversations (N=69; 10 languages), linked to survey data on trust, education, and usage frequency.
- Used chi-square and Fisher's exact tests to examine associations between user characteristics and engagement purposes/topics.
- Theorized human–AI engagement via Uses & Gratifications, Digital Inequality, and trust in science/technology communication.
- Co-developed the coding scheme; implemented quantitative and qualitative pipelines; led results interpretation and presentation.

2024.09 - 2024.12

Simulating and Estimating Network Structures and Social Dynamics [E]

Course Project — Network Modeling, ETH Zurich — Grade: 5.0/6 (3 ECTS)

- Compared generative models (Erdős–Rényi, Watts–Strogatz, Barabási–Albert, Triadic Closure) in R (sna, igraph); evaluated clustering, diameter, and centralization across 100 simulations per model.
- Visualized and interpreted degree distributions, network motifs, and structural biases under varying parameters.
- Estimated SAOMs in RSiena for evolving friendship networks with structural triads, ego attributes, and behavior covariates (e.g., alcohol use).
- Assessed fit via Jaccard similarity, convergence t-ratios, and Mahalanobis GOF; interpreted popularity/proximity effects in continuous-time actor decisions.
- Wrote utility-simulation functions and ran 1,000-sample Monte Carlo GOF.

2024.09 - 2024.12

Social Networks, Misinformation, and Well-being in the Digital Age [A][E]

PhD Seminar: Humans and Social Networks in the Digital Age, ETH Zurich — Grade: 5.75/6 (3 ECTS)

- Led discussion on Vosoughi et al. (2018, *Science*) and introduced novelty/emotional contagion accounts of virality.
- Designed a project on cultural content diversity and interaction modes affecting digital well-being, combining network modeling with emotion analysis.
- Proposed a dual-network design (User–User; User–Content) with ERGMs for tie formation and BERT/GPT classifiers for emotion states.
- Outlined sentiment-driven interaction modeling (e.g., reciprocity, structural virality) and diversity metrics (e.g., Shannon entropy).

2024.09 - 2024.12

Generative AI, Youth Identity, and Inequality in Digital Societies [C]

Seminar: Youth and Digital Technologies, University of Zurich — Grade: 5.5/6 (6 ECTS)

- Investigated how generative AI (e.g., ChatGPT, DALL·E) reshapes youth culture, identity, and decisions via memes, avatars, and co-created AI art.
- Designed a mixed-methods proposal, "Generative AI and Swiss Youth: Shaping Creativity, Identity, and Culture", including a national survey (N=1,000).
- Built a Folium map to visualize global well-being domains from youth perspectives and link them to digital resilience frameworks.

2024.07

What Do Deepfakes Want? Digital Forensic Gaze and Platform Visibility Mapping [C]

Digital Methods Summer School, University of Amsterdam — Supervisor: Prof. Richard Rogers

- Mapped lifecycle and platform-specific visibility of deepfakes across YouTube, TikTok, and Reddit using 4CAT and Gephi.
- Built a cross-platform visibility matrix to identify affordances that amplify or suppress synthetic media circulation.
- Ran hashtag co-occurrence and annotation-based network analysis to trace topic clusters and narrative layering.

2024.07

It's Giving AI: Aesthetic Politics and Language Loss in Generative Imagery [C][E]

Digital Methods Summer School, University of Amsterdam — Supervisors: Houda Lamqaddam, Gabriel Pereira, Kwan Suppaiboonsuk

- Conducted visual discourse analysis and community mapping with 4CAT, Stable Diffusion, and Hugging Face vision models.
- Led subproject "Concept or Language?" showing how language shifts distort political representation in AI-generated portraits.
- Analyzed aesthetic variance across multilingual prompts and probed platform-specific biases in visual outputs.

2024.02 - 2024.05

Prompting Science: ChatGPT's Epistemic Authority in Misinformation Contexts [B][E]

Seminar: Science Communication in the Digital Age, University of Zurich — Grade: 5.0/6 (6 ECTS)

- Designed and led Session 10 (*Dis/Misinformation*), clarifying definitions and contrasting organizational vs. algorithmic response frameworks.
- Ran a prompt-based experiment on science-related misinformation (conspiracy vs. subtle distortion); developed a 4-part evaluation rubric (judgment, source credibility, correction logic, reasoning transparency).
- Applied qualitative content analysis and MAXQDA coding to assess epistemic coherence, authority framing, and rebuttal strategy; found alignment with scientific consensus with trade-offs in ambiguity management and source traceability.
- Wrote a final paper proposing design strategies to enhance epistemic robustness in science communication tools.

2024.03 - 2024.05

GrannyGame: Python Arcade for Memory Training [E]

Course Project — Intermediate Python Programming, University of Zurich

- Built a modular, turn-based 2D game in Python using arcade.
- Applied OOP principles to implement game mechanics and player classes.
- GitHub: ChufanHuang/Group2_Grannygame

2024.02 - 2024.03

Using Language Models to Classify Public Sentiment on Social Media [E][A]

Mini Project — Using Language Models to Mine Public Opinion, University of Zurich

• Built a full NLP pipeline for sentiment classification using TF–IDF + Logistic Regression and transformer-based models.

- Performed preprocessing (tokenization, stopword removal), TF–IDF feature extraction, and F1-score evaluation.
- Applied BERT via transformers to capture nuanced expressions across topic clusters.
- Visualized features and sentiment trends with matplotlib/seaborn; reflected on model bias and interpretability.

2024.02 - 2024.06

Machine Learning: Social Applications, Model Design, and Ethical Analysis [E]

Theory & Methods — *Machine Learning: A Multidisciplinary Introduction*, University of Zurich — *Grade:* 5.0/6 (4 ECTS)

- Built ML models for image classification (CNNs on MNIST), time-series forecasting (LSTMs for Bitcoin and synthetic data), and hate-speech detection (transformer classifiers).
- Conducted adversarial robustness testing (FGSM, FGV) and dropout tuning; visualized uncertainty via kernel density estimation.
- Developed end-to-end workflows: preprocessing, TF–IDF, feature engineering, GridSearchCV, and evaluation (F1, confusion matrix).
- Explored applications in communication, law, healthcare, and education; wrote reflective essays on bias, interpretability, and governance.
- Libraries: scikit-learn, pandas, seaborn, PyTorch, transformers, networkx.

2024.02 - 2024.06

Designing Ethical AI Literacy Tools through Prompt Engineering [B]

Creative Research Project — Designing Digital Futures, University of Zurich — Grade: 5.0/6 (6 ECTS)

- Produced a public-facing multimedia project, "A Guide to Prompt Engineering and Responsible Jailbreaking," combining video storytelling and applied examples.
- Developed 10 categorized prompt types (e.g., comparative, hypothetical, policy, technical) with a referenced theoretical framework and real ChatGPT outputs.
- Tools: ChatGPT, Genny AI, Canva, CapCut; covered prompt clarity, role framing, and ethical model manipulation.
- Addressed risks/affordances of jailbreaking and advocated responsible use grounded in platform ethics and science-communication literature.

2024.02 - 2024.06

Hidden Chilling Effects: Youth Responses to Social Media Dataveillance [D]

Research Seminar — The Chilling Effects of Dataveillance: Empirical Case Studies, University of Zurich — Grade: 4.5/6 (9 ECTS)

- Ran semi-structured interviews with young adults (18–28) on behavioral adaptations to perceived algorithmic surveillance on Instagram, TikTok, and YouTube.
- Identified chilling effects from platform design (feed curation, hashtag suppression) and social surveillance (peer judgment), even without explicit surveillance awareness.
- Developed interview protocols and a thematic coding scheme; analyzed how hybrid awareness (personal vs. mediated) shapes self-censorship.
- Anchored in chilling-effects theory, algorithmic personalization, and relational privacy.
- Contributed to a literature map and methods review on youth entertainment platforms and identity management under dataveillance.

2023.09 - 2023.12

Study Mediatization in Digital Learning Communities [D]

Research Seminar — Online Participation and Communities, University of Zurich — Grade: 5.0/6 (6 ECTS)

- Conducted a qualitative study of TIMING (China) using semi-structured interviews (N=20) and virtual ethnography to examine media-driven learning practices.
- Proposed "study mediatization" to describe how visibility, co-regulation, and affective presence shape learning under platform design.
- Traced how weak ties evolved into supportive bonds via live rooms, performance rituals, and algorithmic

nudging.

- Designed the full protocol: recruitment, consent, coding, and grounded-theory-inspired analysis.
- Co-led a session on fan communities (textual poaching, fan activism, cultural capital).

2023.09 - 2023.12

Designing Surveillance Studies: From the Digital Panopticon to Social Visibility [D][E]

Research Seminar: Privacy, Dataveillance, and Algorithms on the Internet, University of Zurich — Grade: 4.5/6 (6 ECTS)

- Developed a theory-driven mixed-methods research proposal on how dataveillance and peer surveillance jointly affect self-censorship and media behavior.
- Proposed a multi-item survey (Segijn et al., 2022) and cross-generational interviews; planned stratified sampling, regression (SPSS), and thematic analysis (MAXQDA).
- Grounded in Foucault's panopticism and deterrence theory, combined with recent chilling-effects frameworks (e.g., Büchi et al., 2022).
- Presented links between panopticon metaphors, AI-mediated visibility, and platform nudging.

Academic Training or Workshops

2021.07 – 2021.09	Cross-Cultural Communication: Cultural Differences from a Global Perspective Cornell University (Online Seminar) • Analyzed intercultural communication patterns in digital contexts. • Proposed solutions for cross-cultural challenges in global digital platforms.
2020.07 – 2020.09	Summer School on Social Research Methods Peking University, Population Institute • Trained in survey methodology and statistical reasoning for social sciences. • Applied regression modeling techniques to media and communication topics.
2019.05 – 2019.09	Emerging Media Technology-Viax Applied Workshop University of Minnesota-Twin Cities, Hubbard School of Journalism and Mass Communication • Conducted case studies on digital media innovation and platform evolution. • Completed research proposal on emerging media and digital culture.

Service

06 / 2024	 Student Volunteer, 2024 Annual Conference of the Science Communication Division German Communication Association, Zurich, Switzerland Assisted in organizing and managing conference logistics (registration, attendee support, session coordination). Facilitated communication between participants and organizers.
09 / 2020 – 12 / 2020	Teaching Assistant, Computational Communication Sichuan International Studies University (First Master's Program) • Supported lecture prep, grading, and discussion guidance; provided tutoring.
02 / 2020 – 06 / 2020	Teaching Assistant, Journalism and Communication Research Methods Sichuan International Studies University (First Master's Program) • Assisted with grading and study sessions; helped students understand research methods.
09 / 2019 – 12 / 2019	Teaching Assistant, Study of Media Convergence Sichuan International Studies University (First Master's Program)

• Assisted with course preparation, grading, and seminar facilitation.

Working Papers & Writing Samples (Selected)

Working Paper Hidden Chilling Effects: Indirect Perception and Response of Dataveillance

from Social Media

Status: Working Paper (Origin: Research Seminar in Internet & Society)

One-liner: User perceptions of social media surveillance and chilling effects; quali-

tative thematic analysis.

Evaluating ChatGPT's Effectiveness in Detecting Misinformation in Science **Working Paper**

Communication (2024)

Status: Working Paper (Science Communication in the Digital Age seminar) One-liner: Prompt-based evaluation of ChatGPT's responses to science misinfor-

mation; rubric for judgment/credibility/correction/transparency.

Writing Sample Ideological Construction in Science and Technology Reporting: Criticism

Metaphor Analysis based on TIME

Status: Course project

One-liner: Critical metaphor analysis of tech reporting in TIME; ideological fram-

ing lens.

Writing Sample The Development of the First Internet Newspaper: 15 Years of Huffington Post

Status: Course project

One-liner: Historical analysis of Huffington Post as early digital journalism model.

Master's **Thesis** Study Mediatization: A Qualitative Exploratory Analysis of Online Learning (prior) Community

Status: Master's Thesis (First Master's Degree) One-liner: Mediatization in online learning communities; participation & media

practices.

Writing Sample From Text Poaching to Life Existence: Reconstruction and Criticism of Partici-

patory Cultural Landscape (2020)

Status: Working Paper

One-liner: Participatory culture in digital contexts; cultural critique and audience

engagement.

Full list & PDFs: your-site/writing

Methods & Tools

Modeling & Research Methods

- Regression (OLS/Logit), ANOVA, SEM
- Time Series (change point, peak detection)
- Mediation/Moderation, Survey Experiments
- Prompt-based Interventions, Visual Cod-
- Thematic Analysis, Digital Ethnography

Computational Text & Networks

- Topic: BERTopic, LDA, BTM
- Sentiment: VADER, TextBlob
- Transformers: BERT, GPT (prompt cls)
- Network Models: ERGMs, SAOMs (RSiena)
- Tools: statnet (R), Gephi, VISONE, 4CAT

Programming & Reproducibility

- Python: pandas, scikit-learn, scipy, Py-Torch
- R: tidyverse, lavaan, R Markdown
 - GitHub, Jupyter, NVivo, MAXQDA
 - FAIR, DMP; OSF, Zenodo, re3data, CC BY/CC0