# Xinchen Yu

CONTACT INFORMATION

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xinchenyu.github.io

RESEARCH INTERESTS

My research lies at the intersection of natural language processing (NLP) and computational social science (CSS). The primary goal is to develop trustworthy AI systems that understand human conversations and capture early signals to proactively support wellbeing.

I specifically focus on answering three core questions: What are desired and undesired outcomes in human interactions? What factors shape these outcomes? Can we forecast undesired outcomes before they occur? To investigate these questions, I ground my work in theories from linguistics, communication, and social psychology. My research activities include developing theory-driven computational frameworks, conducting empirical analyses to identify interpretable behavioral and contextual factors, and building predictive models that are context-aware and outcome-directed.

ACADEMIC APPOINTMENTS

**Assistant Professor of Practice**, Department of Computer Science     Aug. 2023 - present
University of Arizona, Tucson, AZ

EDUCATION

**Ph.D. in Information Science** (Data Science Concentration)     Jul. 2023
University of North Texas, Denton, TX
Committee: Lingzi Hong (Chair), Eduardo Blanco, Junhua Ding, and Diyi Yang
Thesis: Countering Hate Speech: Modeling User-generated Web Content Using Natural Language Processing (NLP)

**M.S. in Information Science**     May 2019
University of Pittsburgh, Pittsburgh, PA

**B.S. in Library and Information Science**     May 2017
Zhejiang University, Hangzhou, China

GRANTS UNDER PREPARATION

**National Science Foundation**     2025
STEM K-12
Principal Investigator: Xuan Lu, Co-PIs: Xiao Hu, Egoitz Laparra, and Xinchen Yu

AWARDED GRANTS

**NVIDIA Academic Grant Program** ($4,000 hardware gifts)     2025
*Behavior-Guided RAG for Conversational Outcomes Forecasting*
Principal Investigator: Xinchen Yu, Co-PI: Eduardo Blanco

**NSF ACCESS Program** (750,000 ACCESS credits)     2025
Principal Investigator: Xinchen Yu

**UNT Graduate Student Research Awards** (awarded twice, $2,400)     2021 - 2022
Principal Investigator: Xinchen Yu

DECLINED GRANTS

**Jetstream2 NAIRR AI Fellows Program** (acceptance rate: 5.8%)     2025
Principal Investigator: Xinchen Yu

**National Science Foundation**     2024
Strengthening the Cyberinfrastructure Professionals Ecosystem (SCIPE)
Principal Investigator: Chi-kwan Chan, Role: Senior Personnel

(* denotes students (co-)mentored by me)

**PAPER UNDER PREPARATION**

**Xinchen Yu**, Eduardo Blanco, Stephen A. Rains. From Words to Bonds: Predicting Relationship Outcomes from Self-Disclosure. *In preparation to be submitted to ACL'26.*

**PAPER UNDER REVIEW**

**Xinchen Yu**, Huaiyu Chen,* Yu Chi. Pinpointing Recovery Stages in Opioid Use Disorder: Language, Social Support, and Transitions. Under review by *Journal of Information Processing and Management*.

Yeaeun Kwon* and **Xinchen Yu**. Media Bias and Incivility: Community Profiles Matter. Under review by *ICWSM'26*.

**PEER-REVIEWED CONFERENCE PAPERS**

**Xinchen Yu**, Hayden Armold,* Benjamin Su,* Eduardo Blanco (2025). Measuring and Forecasting Conversation Incivility: the Role of Antisocial and Prosocial Behaviors. In *Proceedings of the International AAAI Conference on Web and Social Media* (ICWSM'25). Vol. 19, pp. 2167-2181. Copenhagen, Denmark (Early acceptance rate: 9.2%).

**Xinchen Yu**, Yan Zhang, Wonchan Choi, Annie T. Chen (2025). Researching Health Information Behaviors: Landscape, AI's Role and Its Impact. In *Proceedings of the 88th Annual Meeting of the Association for Information Science and Technology* (ASIS&T'25). 62(1), 1315-1319.

Xiaoying Song, Sharon Lisseth Perez, **Xinchen Yu**, Eduardo Blanco, Lingzi Hong (2025). Echoes of Discord: Forecasting Hater Reactions to Counterspeech. In *Findings of the Association for Computational Linguistics: NAACL 2025* (NAACL'25), pp. 4892–4905, Albuquerque, New Mexico. Association for Computational Linguistics.

**Xinchen Yu**, Eduardo Blanco, Lingzi Hong (2024). Hate Cannot Drive out Hate: Forecasting Conversation Incivility following Replies to Hate Speech. In *Proceedings of the 18th International AAAI Conference on Web and Social Media* (ICWSM'24). Vol. 18, pp. 1740-1752. Buffalo, NY, USA.

**Xinchen Yu**, Ashley Zhao,* Eduardo Blanco, Lingzi Hong (2023). A Fine-Grained Taxonomy of Replies to Hate Speech. In *Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing* (EMNLP'23). pp. 7275–7289. Singapore.

**Xinchen Yu**, Zhuoli Xie, Afra Mashhadi, Lingzi Hong (2022). Multi-task Models for Multi-faceted Classification of Pandemic Information on Social Media. In *Proceedings of the 14th ACM Web Science Conference* (WebSci'22). pp. 327-335. Barcelona, Spain.

**Xinchen Yu**, Eduardo Blanco, Lingzi Hong (2022). Hate Speech and Counter Speech Detection: Conversational Context Does Matter. In *Proceedings of the 2022 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies* (NAACL'22). pp. 5918–5930. Seattle, WA, USA.

**Xinchen Yu**, Jeremy Boy, Rene Clausen Nielsen, Lingzi Hong (2022). Linguistic Characteristics of Social Media Messages Spreading across Geographic and Linguistic Boundaries. In *Proceedings of the 9th European Conference on Social Media* (ECSM'22). pp. 211-218. Virtual.

**Xinchen Yu**, Afra Mashhadi, Jeremy Boy, Rene Clausen Nielsen, Lingzi Hong (2022). Causal Impact Model to Evaluate the Diffusion Effect of Social Media Campaigns. In *Proceedings of 20th European Conference on Computer-Supported Cooperative Work* (ECSCW'22). Vol. 6, no. 1. Coimbra, Portugal.

**Xinchen Yu**, Daida Shashidhar Reddy, Lasya Bentula, Lingzi Hong (2020). Characteristics of Information Spreading across Nations. In *Proceedings of the Association for Information Science and Technol-*

*ogy* (<u>ASIS&T'20</u>). Vol 57:e309. Pittsburgh, PA, USA.

**Xinchen Yu**, Shashidhar Reddy Daida, Jeremy Boy, Lingzi Hong (2020). The Effect of Structural Affinity on the Diffusion of a Transnational Online Movement: The Case of #MeToo. In *Proceedings of the 12th International Conference on Social Informatics* (<u>SocInfo'20</u>). pp. 447-460. Virtual.

JOURNAL PAPERS

Lingzi Hong, William Moen, **Xinchen Yu**, Jiangping Chen (2021). The Disciplinary Research Landscape of Data Science Reflected in Data Science Journals. In *Journal of Information Discovery and Delivery*. Vol. 49, pp. 287-297.

Alexander Kahanek, **Xinchen Yu**, Lingzi Hong, Ana Cleveland, Jodi Philbrick (2021). Temporal Variations and Spatial Disparities in Public Sentiment Toward COVID-19 and Preventive Practices in the United States: Infodemiology Study of Tweets. In *JMIR Infodemiology*. 2021;1(1):e31671.

TEACHING

**Instructor of Record** at the University of Arizona.
- CSC 110: Introduction to Computer Programming I (5 semesters: Fall 2023 - Fall 2025)
- CSC 380: Principles of Data Science (3 semesters: Fall 2023, Spring 2024, Fall 2025)

**Instructor of Record** at the University of North Texas.
- INFO 4670: Data Analysis and Knowledge Discovery (Fall 2022)

SERVICE AND OUTREACH

Research Mentoring and Advising
- Yeaeun Kwon, UofA; current PhD student at the college of information science
- Aidan Linder, UofA; current CS graduate student
- Maya Vanderpool, UofA; current CS undergraduate student
- Hayden Armold, UofA; undergraduate student → graduate student at KAIST
- Benjamin Su, UofA; undergraduate student → graduate student at USC
- Selina Lu, UofA; undergraduate student → graduate student at CMU
- Ashley Zhao, TAMS; high school student → undergraduate student at Cornell

Honors Project Advising
- Lilian Li, UofA; current CS undergraduate student
- Amya Prophet, UofA; current CS undergraduate student
- Maya Vanderpool, UofA; current CS undergraduate student
- Alejandro Serrano, UofA; current CS undergraduate student

Conference and Workshop Organizing
- Officer of the ASIS&T US West Chapter (2025 - present)
- Area Chair of the 31st International Conference on Computational Linguistics (COLING 2025): Offensive Speech Detection and Analysis track
- Organizer of the 7th Women in Data Science Tucson Conference (WiDS-Tucson 2025), wids-tucson.github.io
- Organizer and Moderator of the 2025 Workshop on Considering Cultural and Linguistic Diversity in AI Applications, cald-ai.github.io

Conference Reviewing
- ACL Rolling Review (2023 - current)

- The 15th edition of the Language Resources and Evaluation Conference (LREC 2026)
- The 2026 International AAAI Conference on Web and Social Media (ICWSM 2026)
- The First Workshop on Bridging NLP and Public Opinion Research (NLPOR 2025)
- The Annual Meeting of the Association for Computational Linguistics (ACL 2024)
- The Conference on Empirical Methods in Natural Language Processing (EMNLP 2023 - 2025)
- The Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING 2024)
- The ACM Conference on Human Factors in Computing Systems (CHI 2024)

Journal Reviewing
- Journal of Computational Linguistics
- Journal of Computer Standards & Interfaces
- Journal of Information Discovery and Delivery
- Journal of the Electronic Library

To University of Arizona

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| • Faculty Advisor, Women in Information and Computer Science | Fall 2023-Spring 2025 |
| • Member, Transfer Student Support Committee | Fall 2023-Spring 2024 |
| • Member, Intro-Sequence Committee | Spring 2025 |
| • Member, Career-Track Evaluation Committee | Spring 2025 |
| • Member, Undergraduate Curriculum Committee | Fall 2025 |
| • Member, Career-Track Search Committee | Fall 2025 |

| HONORS AND AWARDS | | |
|---|---|---|
| | UNT Margaret Irby Nichols Endowed Scholarship ($1,000) | 2023 |
| | UNT Dewey E. Carroll Endowed Graduate Fellowship ($4,000, top 1) | 2022 |
| | UNT Graduate Student Research Awards ($1,200) | 2021, 2022 |
| | UNT Department of Information Science Travel Grant | 2020, 2022 |
| | UNT COVID-19 Student Success Award ($1,000) | 2020, 2021 |
| | ZJU Excellent Student Awards | 2014-2017 |
| | ZJU Hengyi Scholarship (top 1/326) | 2016 |
| | ZJU Real Estate Fund Scholarship | 2015 |

INVITED TALKS

Researching Health Information Behaviors: Landscape, AI's Role and Its Impact
- ASIS&T, Panel, Dec. 2025

GenAI Today (Outreach)
- WiDS-Tucson Conference, Panel, Mar. 2025

Countering Hate Speech: Detection, Strategies, and Forecasting.
- Lucy Wang's Group Seminar, University of Washington, Oct. 2024

Hate Speech and Counter Speech Detection: Conversational Context Matters
- WiDS-Tucson Conference, Mar. 2024

Hate Speech and Counter Speech Detection: Conversational Context Matters
- AJCAI Workshop on Toxic Language Detection (TLD), Dec. 2022