Xinchen Yu

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RESEARCH INTERESTS

My research lies at the intersection of natural language processing (NLP) and computational social science (CSS). The primary goal is to make computers understand and facilitate better communication between people. My latest work centers on explaining, predicting, and preventing incivility in user-generated content. Specifically, I enhance the robustness of NLP systems in identifying hate speech and counter speech. Additionally, I develop reliable frameworks to measure and forecast the incivility of conversations, as well as bridge the gap between computer science and computational social science to facilitate the use of cutting-edge AI models in other disciplines, including communication and social science.

ACADEMIC APPOINTMENTS ${\bf Assistant\ Professor\ of\ Practice}, Department\ of\ Computer\ Science$

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, 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 Zhejiang University, Hangzhou, China

May 2017

PEER-REVIEWED CONFERENCE PAPERS Note: NAACL and EMNLP are recognized as top-tier conferences in natural language processing (NLP). ICWSM is a top-tier conference in computational social science (CSS). ASIS&T is a leading venue for research focusing on information science and technology. The average acceptance rate for all these conferences is approximately 25%.

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).

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), pages 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, NJ, 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* (EUSSET'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 Technology* (ASIS&T'20). 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* (SocInfo'20). 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 (Fall 2023 Fall 2025)
- CSC 380: Principles of Data Science (Fall 2023, Spring 2024, Fall 2025)

Instructor of Record at the University of North Texas.

• INFO 4670: Data Analysis and Knowledge Discovery (Fall 2022)

Teaching Assistant at the University of North Texas.

- INFO 3010: Introduction to Data Science (Fall 2020, Fall 2021)
- INFO 5709: Data Visualization and Communication (Spring 2021, Spring 2022)

SERVICE

Mentoring and Advising

• Hayden Armold, UofA, undergraduate student \rightarrow KAIST

- Benjamin Su, UofA, undergraduate student \rightarrow USC
- Selina Lu, UofA, undergraduate student \rightarrow CMU
- Ashley Zhao, TAMS, high school student → Cornell

Conference and Workshop Organizing

- 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
- Organzier and Moderator of the 2025 Workshop on Considering Cultural and Linguistic Diversity in AI Applications, cald-ai.github.io

Reviewing

- ACL Rolling Review
- 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, 2024)
- 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)
- Computational Linguistics
- Computer Standards & Interfaces
- Information Discovery and Delivery
- The Electronic Library

To University of Arizona

| | 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 |
| 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

Countering Hate Speech: Detection, Strategies, and Forecasting.

• Lucy Wang's Group Seminar, University of Washington, Oct. 2024

Forecasting Conversation Incivility following Replies to Hate Speech.

• ICWSM, Jun. 2024

A Fine-Grained Taxonomy of Replies to Hate Speech

• EMNLP, Dec. 2023

Hate speech and counter speech detection.

- AJCAI Workshop on Toxic Language Detection (TLD), Dec, 2022
- NAACL, Oral Presentation, Aug. 2022

Multi-Faceted Classification of Pandemic Information.

• WebSci, Oral Presentation, Jun. 2022

Characteristics of Information Spreading across Nations.

• ASIS&T, Oral Presentation, Oct. 2020