Xinchen Yu

CONTACT INFORMATION

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RESEARCH INTERESTS

My research lies at the intersection of **natural language processing (NLP)** and **computational social science (CSS)**. I am passionate about **conversational behaviors** and **anti-social computing**. The primary goal is to model conversations from user-generated content to **explain, predict, and prevent online incivility**. Specifically, I enhance NLP system performance on modeling uncivil behaviors by **incorporating conversational context**. Additionally, I develop frameworks to **measure and forecast incivility of conversations**. I am also interested in developing socially aware language technologies and facilitate their usage in other disciplines such as social and political science.

ACADEMIC APPOINTMENTS

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

EDUCATION

Ph.D. in Information Science — Jul. 2023
University of North Texas, Denton, TX
Advisor: Lingzi Hong
Committee: 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 — May 2017
Zhejiang University, Hangzhou, China

PAPERS IN SUBMISSION

Xinchen Yu, Hayden Armold, Benjamin Su, Eduardo Blanco. Measuring and Forecasting Conversation Incivility: the Role of Antisocial and Prosocial Behaviors. *Under review*

Xiaoying Song, Sharon Lisseth Perez, **Xinchen Yu**, Eduardo Blanco, Lingzi Hong. Echoes of Discord: Forecasting Hater Reactions to Counterspeech. *Under review*

PUBLICATIONS

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 2024).

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 2023).

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 2022).

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 2022).

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 2022).

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 2022).

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*.

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*.

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 2020).

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 2020).

Invited Talks

Forecasting Conversation Incivility following Replies to Hate Speech.

- ICWSM, Jun. 2024

Hate speech and counter speech detection.

- Women in Data Science Worldwide Tucson Conference (WiDS), Mar. 2024
- AJCAI Workshop on Toxic Language Detection (TLD), Dec, 2022
- NAACL, Aug. 2022

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

Teaching

Instructor of record at the University of Arizona.

- CSC 110: Introduction to Computer Programming I (Fall 2023 - Fall 2024)
- CSC 380: Principle of Data Science (Fall 2023 - Spring 2024)

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 → KAIST Digital Humanities and Computational Social Sciences
- Benjamin Su, UofA, undergraduate student → USC Viterbi School of Engineering
- Selina Lu, UofA, undergraduate student → CMU School of Information Systems & Management
- Ashley Zhao, TAMS, high school student → Cornell Engineering

Area Chairing

- COLING 2025: Offensive Speech Detection and Analysis track

Reviewing

- ACL 2024
- EMNLP 2023, 2024
- LREC-Coling 2024
- CHI 2024
- Computational Linguistics
- Information Discovery and Delivery
- The Electronic Library

To University of Arizona

- Faculty Advisor, Women in Information and Computer Science — Fall 2023-Fall 2024
- Member, Transfer Student Support Committee — Fall 2023-Spring 2024