# Hongli Zhan

Ph.D. Student at UT Austin

Department of Linguistics
The University of Texas at Austin

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Personal Website

G Github

#### Education

2021 - Ph.D. in Computational Linguistics (Minor in Computer Science).

Department of Linguistics, The University of Texas at Austin, Austin, TX

- Advisor: Prof. Junyi Jessy Li
- Qualifying Paper Readers: Prof. Junyi Jessy Li, Prof. Desmond C. Ong, Prof. David I. Beaver
- 2017 2021 B.A. in English Linguistics (Second Major in Law).

School of Foreign Languages, Shanghai Jiao Tong University, Shanghai, China

## Research Appointments

Summer 2024 (Incoming) Inclusive Language Technologies Intern.

Tech for Justice group, IBM Research, Yorktown Heights, NY

• Manager: Dr. Raya Horesh

Fall 2021 - Graduate Research Assistant.

Department of Linguistics, The University of Texas at Austin, Austin, TX

• Supervisor: Prof. Junyi Jessy Li

#### Research Interests

The ambition of my Ph.D. research is to **build emotionally intelligent AI systems in a broader social context**. Specifically, I focus on Affective Computing, which tries to build NLP models with a deeper emotional understanding.

- ⇒ **EMNLP 2022 & ACL 2023:** We tapped into the questions of "How do people feel about and make sense of what took place in their lives during major social events?", and proposed \*Emotion Detection and Trigger Summarization\*, a new task to detect perceived emotions in text automatically and abstractively summarize triggers of each emotion.
- ⇒ **EMNLP 2023 Findings:** Grounded in Psychology theories, my work further explored the capability of LLMs on complex emotional understanding tasks: are they able to assess and explain \*cognitive appraisals\* (how individuals subjectively interpret and evaluate a situation) that lead to diverse emotional experiences.

#### Refereed Publications

\* denotes equal contributions

EMNLP 2023 **Hongli Zhan**, Desmond C. Ong, and Junyi Jessy Li. Evaluating subjective cognitive appraisals (Findings) of emotions from large language models. In Houda Bouamor, Juan Pino, and Kalika Bali, editors, *Findings of the Association for Computational Linguistics: EMNLP 2023*, pages 14418–14446, Singapore, December 2023. Association for Computational Linguistics.

ACL 2023 Tiberiu Sosea\*, **Hongli Zhan\***, Junyi Jessy Li, and Cornelia Caragea. Unsupervised extractive summarization of emotion triggers. In Anna Rogers, Jordan Boyd-Graber, and Naoaki Okazaki, editors, *Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics* (Volume 1: Long Papers), pages 9550–9569, Toronto, Canada, July 2023. Association for Computational Linguistics.

EMNLP 2022 **Hongli Zhan\***, Tiberiu Sosea\*, Cornelia Caragea, and Junyi Jessy Li. Why do you feel this way? summarizing triggers of emotions in social media posts. In Yoav Goldberg, Zornitsa Kozareva, and Yue Zhang, editors, *Proceedings of the 2022 Conference on Empirical Methods in Natural Language Processing*, pages 9436–9453, Abu Dhabi, United Arab Emirates, December 2022. Association for Computational Linguistics.

#### Professional Service

Reviewer, EMNLP 2023, ICRA 2024.

Student Volunteer, ACL 2023.

Spring 2023 - Organizer, Natural Language Learning Reading Group, UT Austin.

## Teaching Experience

The University of Texas at Austin

LIN 371 Machine Learning for Text Analysis, Graduate Teaching Assistant, Spring 2024.

Instructor: Prof. Junyi Jessy Li

LIN 306 Intro to the Study of Language, Guest Lecturer, Spring 2023.

Instructor: Seyeon Park

LIN 373N Machine Learning Toolbox for Text Analysis, Guest Lecturer, Fall 2022.

Instructor: Prof. Junyi Jessy Li

LIN 373N Machine Learning Toolbox for Text Analysis, Graduate Teaching Assistant, Fall 2022.

Instructor: Prof. Junyi Jessy Li

LIN 350 Computational Semantics, Graduate Teaching Assistant, Fall 2021.

Instructor: Prof. Katrin Erk

## Mentoring

Fall 2023 - Allen Zheng, B.S. in Computer Science (Turing Honors) & Mathematics, UT Austin.

#### Fellowships & Awards

- Fall 2023 Professional Development Award for Attending EMNLP 2023, UT Austin, 1,160 USD.
- Fall 2022 Professional Development Award for Attending EMNLP 2022, UT Austin, 1,200 USD.
- Spring 2022 COLA Supplemental Graduate School Fellowship, UT Austin, 5,000 USD.
  - 2021 Outstanding Graduate, Shanghai Jiao Tong University.
  - 2021 Outstanding Undergraduate Thesis Award, Shanghai Jiao Tong University.

#### Conference Presentations

- ACL 2023 Unsupervised Extractive Summarization of Emotion Triggers, *Toronto, Canada*, presented in-person on July 11th, 2023.
- EMNLP 2022 Why Do You Feel This Way? Summarizing Triggers of Emotions in Social Media Posts, Abu Dhabi, United Arab Emirates, presented in-person on Dec 9th, 2022.

#### Invited Talks

- Oct 11, 2023 Can I Cheer You Up? Psychologically-Grounded Emotional Support: Leveraging LLMs for Targeted Re-Appraisals, Computational Affective and Social Cognition Lab (CASCogLab), Department of Psychology, The University of Texas at Austin, Austin, TX.
- Feb 22, 2023 An Introduction to Computational Linguistics, Westlake High School, Austin, TX.

## **Open-Source Contributions**

CovidET https://github.com/honglizhan/CovidET.

CovidET (Emotions and their Triggers during Covid-19) is a dataset of 1,883 English Reddit posts related to COVID-19, which contains manual annotations of perceived emotions and abstractive summaries of their triggers described in the post.

CovidET- https://github.com/tsosea2/CovidET-EXT.

EXT CovidET-EXT is a dataset that augments Zhan et al. (2022)'s abstractive dataset CovidET (in the context of the COVID-19 crisis) with extractive triggers. The result is a dataset of 1,883 Reddit posts about the COVID-19 pandemic, manually annotated with 7 fine-grained emotions (from CovidET) and their corresponding **extractive** triggers.

CovidET- https://github.com/honglizhan/CovidET-Appraisals-Public.

Appraisals CovidET-Appraisals is the most comprehensive dataset to-date that assesses 24 cognitive appraisal dimensions of emotions, each with a natural language rationale, across 241 Reddit posts. CovidET-Appraisals presents an ideal testbed to evaluate the ability of large language models — excelling at a wide range of NLP tasks — to automatically assess and explain cognitive appraisals.

## Language Skills

Mandarin Native.

English Near-Native.

• TOEFL iBT: 112/120

• GRE: Verbal 162/170, Quantitative 167/170, Analytical Writing 5.0/6.0

• Test for English Majors Band 8 (TEM-8): Good

• Test for English Majors Band 4 (TEM-4): Excellent (90/100)

Japanese Upper-Intermediate.

• Japanese was taught as my Second Foreign Language course at SJTU

Italian Intermediate.