Hongli Zhan

Ph.D. Student at UT Austin

Department of Linguistics
The University of Texas at Austin
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Personal Website
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

Industry Experience

Summer 2024 **Inclusive Language Technologies Intern**, *IBM Research*, Yorktown Heights, NY.
- Manager: Dr. Raya Horesh

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 (Findings) **Hongli Zhan**, Desmond C. Ong, and Junyi Jessy Li. Evaluating subjective cognitive appraisals 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 & Research Appointments

Reviewer, *EMNLP 2023*, *ICRA 2024*.

Student Volunteer, *ACL 2023*.

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

Fall 2021 – **Graduate Research Assistant**, *Supervised by Prof. Junyi Jessy Li*, UT Austin.

Teaching Experience

The University of Texas at Austin

LIN 371 **Machine Learning 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 (**E**motions and their **T**riggers 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-EXT `https://github.com/tsosea2/CovidET-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-Appraisals `https://github.com/honglizhan/CovidET-Appraisals-Public`.
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**.