Pei Zhou

peiz@usc.edu

sites.google.com/g.ucla.edu/peizhou

Education

University of Southern California

Ph.D. in Computer Science

Co-advisors: Xiang Ren and Jay Pujara

Focus: Reasoning for Smooth Human-AI Communication with LMs

Aug'19 - May'24 (expected)

Los Angeles, CA

University of California, Los Angeles

B.S. in Mathematics of Computation

Los Angeles, CA Sep'15 - Jun'19

Research Experience Google Research - Bard

Research Intern, Mentors: Shyam Upadhyay and Manaal Faruqui

Project: Situated Reasoning with Theory-of-Mind in LLMs

Mountain View, CA May'23 - Aug'23

Allen Institute of Artificial Intelligence (AI2) - Mosaic

Research Intern, Mentors: Prithviraj Ammanabrolu and Yejin Choi

Project: Generating Guidance in D&D with Intents and Theory-of-Mind RL

Seattle, WA May'22 - Aug'22

Amazon Alexa AI - Dialogue Modeling Team

May'21 - Aug'21 Applied Scientist Intern, Mentors: Yang Liu and Dilek Hakkani-Tur Project: Commonsense Reasoning in Dialogue Response Generation May'20 - Aug'20

UCLA-Research Lab

Researcher, Mentor: Kai-Wei Chang Project: Gender Bias in Word Embeddings Los Angeles, CA Sep'17 - Jun'19

Sunnyvale, CA

Selected Publications

[1] **Pei Zhou** Hyundong J. Cho, Pegah Jandaghi, Dong-Ho Lee, Bill Yuchen Lin, Jay Pujara, Xiang Ren

I Cast Detect Thoughts: Learning to Converse and Guide with Intents and Theory-of-Mind in Dungeons and Dragons

In Proceedings of ACL 2023. Long Paper

[2] **Pei Zhou** Hyundong J. Cho, Pegah Jandaghi, Dong-Ho Lee, Bill Yuchen Lin, Jay Pujara, Xiang Ren

Reflect, Not Reflex: Inference-Based Common Ground Improves Dialogue Response Quality

In Proceedings of EMNLP 2022. Long Paper

[3] Pei Zhou, Karthik Gopalakrishnan, Behnam Hedayatnia, Seokhwan Kim, Jay Pujara, Xiang Ren, Yang Liu, Dilek Hakkani-Tur

Think Before You Speak: Explicitly Generating Implicit Commonsense Knowledge for Response Generation

In Proceedings of ACL 2022. Long Paper

[4] **Pei Zhou**, Rahul Khanna, Seyeon Lee, Bill Yuchen Lin, Daniel Ho, Jay Pujara, Xiang Ren

RICA: Evaluating Robust Inference Capabilities Based on Commonsense Axioms

In Proceedings of EMNLP-main conference 2021. Long Paper

[5] Ninareh Mehrabi*, Pei Zhou*, Fred Morstatter, Jay Pujara, Xiang Ren, Aram Galstyan

Lawyers are Dishonest? Quantifying Representational Harms in Commonsense Knowledge Resources

In Proceedings of EMNLP-main conference 2021. Long Paper

[6] Pei Zhou, Pegah Jandaghi, Hyundong Cho, Bill Yuchen Lin, Jay Pujara, Xiang Ren

Probing Commonsense Explanation in Dialogue Response Generation

In Proceedings of EMNLP-Findings 2021. Long Paper

[7] Pei Zhou, Karthik Gopalakrishnan, Behnam Hedayatnia, Seokhwan Kim, Jay Pujara, Xiang Ren, Yang Liu, Dilek Hakkani-Tur

Commonsense-Focused Dialogues for Response

Generation: An Empirical Study

In Proceedings of SIGDIAL 2021. Long Paper

[8] Bill Yuchen Lin, Wangchunshu Zhou, Ming Shen, **Pei Zhou**, Chandra Bhagavatula, Yejin Choi, Xiang Ren

CommonGen: A Constrained Text Generation Challenge for Generative Commonsense Reasoning

In Proceedings of EMNLP 2020-Findings. Long Paper

[9] **Pei Zhou**, Weijia Shi, Jieyu Zhao, Kuan-Hao Huang, Muhao Chen, Ryan Cotterell, Kai-Wei Chang

Examining Gender Bias in Languages with Grammatical Gender

In Proceedings of EMNLP-IJCNLP 2019. Long Paper

[10] Weijia Shi*, Muhao Chen*, **Pei Zhou**, Kai-Wei Chang

Retrofitting Contextualized Word Embeddings with Paraphrases

In Proceedings of EMNLP-IJCNLP, 2019. Short Paper

Awards and Honors

Annenberg Fellowship

2019-2023

USC Graduate School Travel Award

Nov. 2019

ACL Student Research Workshop Travel Grant

May. 2019

ICDM Student Travel Award

Nov. 2018

Internet Research Initiative Prize,

2018 - 2019

ASA Datafest Judge's Choice Award

May. 2018

Professional Services

Co-Organizer:

AI Rising Star Symposium 2019

Mentoring Committee:

 $AACL\text{-}IJCNLP\ SRW\ 2021$

Program Committee (Reviewer):

ACL Rolling Review 2021-2022, EMNLP 2021, ACL 2021, AAAI 2021, AACL 2021,

AKBC 2020, ICML 2020 (Invited), SoCalNLP Symposium 2019

External Reviewer:

TACL2021, AAAI 2020, COLING 2020, NLPCC 2018, IEEE Big Data 2018

Skills

Python, PyTorch, C++, TensorFlow, R, Matlab