SHIJIE CHEN

✉ chen.10216@osu.edu % https://chensj98.github.io

RESEARCH INTEREST

My research interest lies in large language models (LLMs) and AI agents. I'm generally interested in understanding language semantics and building AI systems that are more interpretable and trustworthy.

EDUCATION

The Ohio State University (OSU)   Sep 2021 – Present
Ph.D. in Computer Science and Engineering   Columbus, OH, USA
Co-advised by Prof. Yu Su and Prof. Huan Sun

Southern University of Science and Technology (SUSTech)   Sep 2016 – Jun 2020
B.E. in Computer Science and Technology   Shenzhen, China

PROFESSIONAL EXPERIENCE

Graduate Research Associate   Sep 2021 – Present
OSU NLP Group   Columbus, OH, USA
Advisors: Prof. Yu Su and Prof. Huan Sun

AI Research Scientist Intern   May 2024 – Aug 2024
Zoom Video Communications, Inc.   Remote, USA
Manager: Dr. Silei Xu

Applied Scientist Intern   May 2023 – Aug 2023
Amazon Alexa AI   Sunnyvale, CA, USA
Manager: Dr. Di Jin

Research Assistant   Sep 2020 – June 2021
Department of Computer Science and Engineering, SUSTech   Shenzhen, China
Advisor: Prof. Yu Zhang

Machine Learning Engineer Intern   Jun 2019 – Jun 2020
AI Lab, ZhuiYi Technology   Shenzhen, China
Manager: Dr. Xuefeng Yang

SELECTED PAPERS

1. Attention in Large Language Models Yields Efficient Zero-Shot Re-Rankers
   Shijie Chen, Bernal Jiménez Gutiérrez, and Yu Su.
   arXiv preprint arXiv:2410.02642, 2024

2. ScienceAgentBench: Toward Rigorous Assessment of Language Agents for Data-Driven Scientific Discovery
   Ziru Chen, **Shijie Chen**, Yuting Ning, Qianheng Zhang, Boshi Wang, Botao Yu, Yifei Li, Zeyi Liao, Chen Wei, Zitong Lu, Vishal Dey, Mingyi Xue, Frazier N. Baker, Benjamin Burns, Daniel Adu-Ampratwum, Xuhui Huang, Xia Ning, Song Gao, Yu Su, and Huan Sun
   arXiv preprint arXiv: 2410.05080, 2024

3. Multi-task learning in natural language processing: An overview
   Shijie Chen, Yu Zhang, and Qiang Yang.
   ACM Computing Surveys, 2024

4. Mind2Web: Towards a Generalist Agent for the Web
   Xiang Deng, Yu Gu, Boyuan Zheng, **Shijie Chen**, Samuel Stevens, Boshi Wang, Huan Sun, and Yu Su
   Advances in Neural Information Processing Systems , 2023

5. Error Detection for Interactive Text-to-SQL Semantic Parsing
   Shijie Chen, Ziru Chen, Huan Sun, and Yu Su.
   In Findings of the Association for Computational Linguistics: EMNLP 2023

6. Text-to-SQL Error Correction with Language Models of Code
   Ziru Chen, **Shijie Chen**, Michael White, Raymond Mooney, Ali Payani, Jayanth Srinivasa, Yu Su, and Huan Sun
   In Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics, 2023

7. Bootstrapping a User-Centered Task-Oriented Dialogue System
   Shijie Chen*, Ziru Chen*, Xiang Deng, Ashley Lewis, Lingbo Mo, Samuel Stevens, Zhen Wang, Xiang Yue, Tianshu Zhang, Yu Su, and Huan Sun.
   ∗:Team leads, equal contribution
   Alexa Prize TaskBot Challenge Proceedings (3rd place winner), 2022

8. Technical report on Conversational Question Answering.
   Ying Ju, Fubang Zhao, **Shijie Chen**, Bowen Zheng, Xuefeng Yang, and Yunfeng Liu.
   arXiv preprint, 2019

AWARDS

3rd place in the 1st Alexa Prize TaskBot Challenge ($50K prize), Amazon   2022
Outstanding Graduate Award, Department of Computer Science and Engineering, SUSTech   2020