Yaxin Fan

EDUCATION

Soochow University, Jiangsu, China

2021/09 - 2026/06 (Expected)

PhD. Candidate in Software Engineering (Master-PhD Combined Program)

Soochow University, Jiangsu, China

2019/09 - 2021/06

M.S. Candidate in Computer Science and Technology (Master-PhD Combined Program), advised by Prof. Peifeng Li.

Zhengzhou University, Henan, China

2015/09 - 2019/06

B.S. in Computer Science and Technology

RESEARCH FIELD

Before June 2021, my primary focus was on Chinese macro discourse parsing. Since then, I have shifted my attention to dialogue discourse parsing and actively explored applying discourse structures to downstream tasks, such as multi-party dialogue generation. Additionally, I have closely collaborated with partners on topic shift detection, query rewriting, proactive dialogue, and applications of LLMs. Currently, my main focus is on leveraging LLMs to enhance dialogue discourse parsing.

SELECTED PUBLICATIONS

Dialogue Discourse Parsing

- Yaxin Fan, Peifeng Li, and Qiaoming Zhu. 2025. Improving Dialogue Discourse Parsing through Discourse aware Utterance Clarification. In Proceedings of the 63rd Annual Meeting of the Association for Computational Linguistics (ACL'25).
- Yaxin Fan, Feng Jiang, Peifeng Li, and Haizhou Li. 2024. Uncovering the Potential of ChatGPT for Discourse Analysis in Dialogue: An Empirical Study. In Proceedings of the 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING'2024).
- Yaxin Fan, Feng Jiang, Peifeng Li, Fang Kong, and Qiaoming Zhu. 2023. Improving Dialogue Discourse
 Parsing via Reply-to Structures of Addressee Recognition. In Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing (EMNLP'2023).
- Yaxin Fan, Peifeng Li, Fang Kong, and Qiaoming Zhu. A Distance-Aware Multi-Task Framework for Conversational Discourse Parsing. 2022. In Proceedings of the 29th International Conference on Computational Linguistics (COLING'22).
- Shannan Liu, Peifeng Li, **Yaxin Fan**, and Qiaoming Zhu. 2025. Enhancing Multi-party Dialogue Discourse Parsing with Explanation Generation. In Proceedings of the 31st International Conference on Computational Linguistics (COLING'2025).

Proactive Dialogue System

• Didi Zhang, **Yaxin Fan**(Co-first author), Peifeng Li, and Qiaoming Zhu. 2025. Enhancing Goal-oriented Proactive Dialogue Systems via Consistency Reflection and Correction. In Proceedings of the 63rd Annual Meeting of the Association for Computational Linguistics (ACL'25).

Multi-Party Dialogue Generation

• Yaxin Fan, Peifeng Li, and Qiaoming Zhu. 2024. Improving Multi-party Dialogue Generation via Topic and Rhetorical Coherence. In Proceedings of the 2024 Conference on Empirical Methods in Natural Language Processing (EMNLP'2024).

Applications of LLMs

- Yaxin Fan, Feng Jiang, Peifeng Li, and Haizhou Li. GrammarGPT: Exploring Open-Source LLMs for Native Chinese Grammatical Error Correction with Supervised Fine-Tuning. 2023. In Proceedings of the 12th CCF International Conference on Natural Language Processing and Chinese Computing (NLPCC'23).
- Chuyi Kong, **Yaxin Fan**, Xiang Wan, Feng Jiang, and Benyou Wang. 2024. PlatoLM: Teaching LLMs in Multi-Round Dialogue via a User Simulator. In Proceedings of the 62nd Annual Meeting of the Association for Computational Linguistics. (ACL'2024).

Topic Shift Detection

• Huiyao Wang, Peifeng Li, **Yaxin Fan**, and Qiaoming Zhu. 2025. Simulating Dual-Process Thinking in Dialogue Topic Shift Detection. In Proceedings of the 31st International Conference on Computational Linguistics (COLING'2025).

Query Rewriting

- Zhiyu Cao, Peifeng Li, Qiaoming Zhu and **Yaxin Fan**. 2025. Two-stage Incomplete Utterance Rewriting on Editing Operation. In Proceedings of the 31st International Conference on Computational Linguistics (COLING'2025).
- Zhiyu Cao, Peifeng Li, **Yaxin Fan**, and Qiaoming Zhu. 2024. Incomplete Utterance Rewriting with Editing Operation Guidance and Utterance Augmentation. In Proceedings of the 2024 Conference on Empirical Methods in Natural Language Processing (EMNLP'2024).

EXPERIENCE

The Chinese University of Hong Kong, Shenzhen Guangdong, China

2023/03 - 2023/11

Visiting Student

- Advisor: Prof. Haizhou Li
- work on Evaluation of Chinese medical LLMs, application of discourse to open-domain LLMs

HONORS & AWARDS

• Third Place in 2023 NLPCC Shared Task 1	2023/05
• Second Place in Track 1, 2022 NLPCC Shared Task 6.	2022/05
• Third Place in Legal Summarization Track, 2021 Challenge of AI in Law (CAIL).	2021/10
National Scholarship for Graduate Student	2019/11

TECHNICAL SKILLS

• Language: Chinese (Native), English (Fluent)

• Coding: Python, C/C++, Java, SQL

• Tools: PyTorch, Git, LaTeX, Markdown