

Jian Wang

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🌐 Homepage: <https://iwangjian.github.io>

EDUCATION

The Hong Kong Polytechnic University (PolyU)

Hong Kong, China

PhD in Computer Science

2021/09 – Present

◦ **Supervisor:** Prof. Maggie Wenjie Li

◦ **Research Interests:** Natural Language Processing (NLP), Dialogue Systems, Conversational AI

South China University of Technology (SCUT)

Guangzhou, China

MSc in Computer Science and Technology

2017/09 – 2020/06

South China University of Technology (SCUT)

Guangzhou, China

BEng in Computer Science and Engineering

2013/09 – 2017/06

BEc in Finance (Minor degree)

RESEARCH EXPERIENCES

University of Michigan

Ann Arbor, MI, USA

Visiting PhD Student

2024/02 – Present

◦ Advisor: Prof. Joyce Chai

◦ Worked on situated dialogue and embodied agents

The Hong Kong Polytechnic University

Hong Kong, China

Research Assistant

2020/11 – 2021/08

◦ Advisor: Prof. Maggie Wenjie Li

◦ Worked on Web search clarification and recommendation-oriented dialogue

Rulai Inc.

Campbell, CA, USA (Remotely)

Research Intern

2020/07 – 2020/10

◦ Advisor: Dr. Yi Zhang

◦ Worked on Text-to-SQL for task-oriented QA systems

SIAT, Chinese Academy of Sciences

Shenzhen, China

Visiting Student

2018/08 – 2019/09

◦ Advisor: Prof. Min Yang

◦ Worked on knowledge-grounded and task-oriented dialogue generation

PUBLICATIONS

- Yi Cheng, Wenge Liu, **Jian Wang**, Chak Tou Leong, Yi Ouyang, Wenjie Li, Xian Wu, and Yefeng Zheng. 2024. COOPER: Coordinating Specialized Agents towards a Complex Dialogue Goal. In *Proceedings of the 38th AAAI Conference on Artificial Intelligence (AAAI'24)*.
- **Jian Wang**, Yi Cheng, Dongding Lin, Chak Tou Leong, and Wenjie Li. 2023. Target-oriented Proactive Dialogue Systems with Personalization: Problem Formulation and Dataset Curation. In *Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP'2023)*.
- Chak Tou Leong, Yi Cheng, Jiashuo Wang, **Jian Wang**, and Wenjie Li. 2023. Self-Detoxifying Language Models via Toxification Reversal. In *Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP'2023)*.
- **Jian Wang**, Dongding Lin, and Wenjie Li. 2023. Dialogue Planning via Brownian Bridge Stochas-

tic Process for Goal-directed Proactive Dialogue. In *Findings of the Association for Computational Linguistics: ACL 2023*.

- Kaishuai Xu, Wenjun Hou, Yi Cheng, **Jian Wang**, and Wenjie Li. 2023. Medical Dialogue Generation via Dual Flow Modeling. In *Findings of the Association for Computational Linguistics: ACL 2023*.
- **Jian Wang**, Dongding Lin, and Wenjie Li. 2023. A Target-Driven Planning Approach for Goal-Directed Dialog Systems. *IEEE Transactions on Neural Networks and Learning Systems (TNNLS)*.
- Dongding Lin*, **Jian Wang***, and Wenjie Li. 2023. COLA: Improving Conversational Recommender Systems by Collaborative Augmentation. In *Proceedings of the 37th AAAI Conference on Artificial Intelligence (AAAI'23)*. (*: Equal contribution)
- Gaoshan Wang, **Jian Wang**, and Kejing He. 2022. Majority-to-Minority Resampling for Boosting-based Classification under Imbalanced Data. *Applied Intelligence*.
- **Jian Wang** and Wenjie Li. 2021. Template-guided Clarifying Question Generation for Web Search Clarification. In *Proceedings of the 30th ACM International Conference on Information & Knowledge Management (CIKM'21)*.
- **Jian Wang**, Junhao Liu, Wei Bi, Xiaojiang Liu, Kejing He, Ruifeng Xu, and Min Yang. 2020. Dual Dynamic Memory Network for End-to-End Multi-turn Task-oriented Dialog Systems. In *Proceedings of the 28th International Conference on Computational Linguistics (COLING'20)*.
- **Jian Wang**, Junhao Liu, Wei Bi, Xiaojiang Liu, Kejing He, Ruifeng Xu, and Min Yang. 2020. Improving Knowledge-Aware Dialogue Generation via Knowledge Base Question Answering. In *Proceedings of the 34th AAAI Conference on Artificial Intelligence (AAAI'20)*.
- **Jian Wang**, Kejing He, and Min Yang. 2020. Topic Discovery by Spectral Decomposition and Clustering with Coordinated Global and Local Contexts. *International Journal of Machine Learning and Cybernetics (JMLC)*.

PROJECTS

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| SMART SPACE | 2022/06 |
| ○ An interactive demo for coffee breaks based on vision, language, and robotics (Led by COMP, PolyU) | |
| ○ Focus on building dialogue agents for human-robot conversations | |
| Multi-skill Dialogue Generation | 2021/05 |
| ○ 2021 Language and Intelligence Challenge: Track 2 (Hosted by Baidu) | |
| ○ Focus on dialogue modeling with multiple skills (knowledge grounding, persona, and recommendation) | |
| Automatic Title Generation for News Articles | 2018/12 |
| ○ Byte Cup 2018 International Machine Learning Contest (Hosted by ByteDance) | |
| ○ Focus on document summarization with a hybrid extractive-abstractive approach | |

HONORS & AWARDS

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| ○ Third Prize of 2021 Baidu Language and Intelligence Challenge | 2021 |
| ○ AAAI 2020 Student Scholarship | 2020 |
| ○ First Class of Academic Scholarship at SCUT | 2018, 2017 |
| ○ Third Prize of Byte Cup 2018 International Machine Learning Contest | 2018 |
| ○ Global Ranking of 50/2121 on IEEE Xtreme 11.0 Programming Competition | 2017 |
| ○ National Scholarship (Top 1% , the highest scholarship for undergraduates) | 2016 |
| ○ Bronze Medal of 2016 HUAWEI Code Craft (Shenzhen Area Site) | 2016 |
| ○ National Encouragement Scholarship | 2015, 2014 |
| ○ Merit Student of SCUT & Outstanding Student Leader of SCUT-CS | 2015, 2014 |

TEACHING EXPERIENCES

- COMP 6709: Advanced Natural Language Processing, TA, PolyU Spring 2023, 2022
- COMP 2021: Object-Oriented Programming, TA, PolyU Fall 2022, 2021
- Design and Analysis of Algorithms, TA, SCUT Spring, 2018
- Advanced Programming Language (C++), TA, SCUT Fall, 2017

PROFESSIONAL ACTIVITIES

- Conference Reviewer: ACL (2023), EMNLP (2022, 2023), COLING (2020, 2022)

TECHNICAL SKILLS

- Coding: Python, C/C++, Java, Shell, SQL, HTML, CSS, JavaScript
- Tools: PyTorch, Tensorflow, Git, Docker, L^AT_EX, Markdown, Vim