

# Jian Wang

☎ (+852) 5332 5143      ✉ jwanglv@gmail.com

📍 Department of Computing, The Hong Kong Polytechnic University

🌐 GitHub: <https://github.com/iwangjian>

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

## Research Interests

- 📌 Natural Language Processing (NLP) and Machine Learning (ML)
- 📌 Building practical and intelligent **dialogue systems**
- 📌 Developing effective and fundamental methods for **natural language generation**

## Education

- 2021/09 – Present      📌 **Ph.D. in Computer Science**  
The Hong Kong Polytechnic University (PolyU), Hong Kong  
Advisor: Prof. Maggie Wenjie Li
- 2017/09 – 2020/06      📌 **M.Eng. in Computer Technology**  
South China University of Technology (SCUT), Guangzhou  
Advisor: Prof. Kejing He
- 2013/09 – 2017/06      📌 **B.Eng. in Computer Science and Engineering (Major)**  
South China University of Technology (SCUT), Guangzhou  
**B.Ec. in Finance (Minor)**  
South China University of Technology (SCUT), Guangzhou

## Publications

### Journal Articles

- Wang, J.**, Lin, D., & Li, W. (2023). A Target-Driven Planning Approach for Goal-Directed Dialog Systems. *IEEE Transactions on Neural Networks and Learning Systems (TNNLS)*, 1–13. Retrieved from <https://doi.org/10.1109/TNNLS.2023.3242071>
- Wang, J.**, He, K., & Yang, M. (2020). Topic Discovery by Spectral Decomposition and Clustering with Coordinated Global and Local Contexts. *International Journal of Machine Learning and Cybernetics (IJMLC)*, 2475–2487. Retrieved from <https://doi.org/10.1007/s13042-020-01133-3>






### Conference Papers

- Lin, D., **Wang, J.**, & Li, W. (2023). COLA: Improving Conversational Recommender Systems by Collaborative Augmentation. In *Proceedings of the 37th AAAI Conference on Artificial Intelligence (AAAI'23)*. (\*: The first two authors contributed equally).
- Wang, J.**, & Li, W. (2021). Template-guided Clarifying Question Generation for Web Search Clarification. In *Proceedings of the 30th ACM International Conference on Information and Knowledge Management (CIKM'21)*. Retrieved from <https://dl.acm.org/doi/10.1145/3459637.3482199>
- Wang, J.**, Liu, J., Bi, W., Liu, X., He, K., Xu, R., & Yang, M. (2020a). 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)*. Retrieved from <https://www.aclweb.org/anthology/2020.coling-main.362>
- Wang, J.**, Liu, J., Bi, W., Liu, X., He, K., Xu, R., & Yang, M. (2020b). Improving Knowledge-aware Dialogue Generation via Knowledge Base Question Answering. In *Proceedings of the 34th AAAI Conference on Artificial Intelligence (AAAI'20)*. Retrieved from <https://aaai.org/ojs/index.php/AAAI/article/view/6453>










## Experiences

- 2020/11 – 2021/08     **The Hong Kong Polytechnic University**, Research Assistant  
*Advisor:* Prof. Maggie Wenjie Li  
Working on Web search clarification and recommendation-oriented dialogue
- 2020/07 – 2020/10     **Rulai Inc.**, Research Intern  
*Advisor:* Dr. Yi Zhang  
Working on Text-to-SQL for conversational systems
- 2018/08 – 2019/09     **SIAT, Chinese Academy of Sciences**, Visiting Student  
*Advisor:* Prof. Min Yang  
Working on knowledge-grounded dialogue generation

## Projects

- 2021/05     **Multi-skill Dialogue Generation:** Baidu Language and Intelligence Challenge - Track 2
- 2021/04     **Medical Conversational QA System:** A demo developed at PolyU
- 2020/10     **Relation-aware Text-to-SQL Service:** A demo developed at Rulai Inc.
- 2019/03     **PyLoader:** An open-source asynchronous Python data loader for loading big datasets
- 2018/12     **News Title Generation:** Byte Cup 2018 International Machine Learning Contest

## Honors and Awards

- 2021     Third Prize of 2021 Baidu Language and Intelligence Challenge: Multi-skill Dialogue
- 2020     AAAI 2020 Student Scholarship
- 2018, 2017     First Class of Academic Scholarship at SCUT
- 2018     Third Prize of Byte Cup 2018 International Machine Learning Contest
- 2017     Ranked 50th Worldwide on IEEE Xtreme 11.0 Programming Competition
- 2016     National Scholarship (**Top 1%**, the highest national wide scholarship for undergraduates)
-  Shenzhen Area Site Bronze Medal of 2016 HUAWEI Code Craft
- 2015, 2014     National Encouragement Scholarship (**Top 10%**)
-  Merit Student of SCUT & Outstanding Student Leader of SCUT-CS

## Teaching Experiences

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

## Technical Skills

- Coding    C/C++, Python, Java, Shell, SQL, HTML, CSS, JavaScript
- Tools    PyTorch, Tensorflow, Git, Docker
- Editing     $\text{\LaTeX}$ , Markdown, Vim