

# Zhiyuan Wen

Postdoctoral Fellow, working with [Prof. Jiannong Cao](#)  
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## EDUCATIONAL BACKGROUND

- 2018.9-2023.12      Ph.D. in Computer Science, The Hong Kong Polytechnic University, Hong Kong, China  
Thesis: Comprehending and Reflecting Personality in Dialog Systems  
Supervisor: [Prof. Jiannong Cao](#), IEEE Fellow
- 2021.9-2022.3      Visiting Student at [THUNLP](#) Lab, Tsinghua University, Beijing, China  
Supervisor: [Prof. Maosong Sun](#), ACL Fellow
- 2013.9-2017.6      B.E. on Information Security, Sun Yat-sen University (SYSU), Guangzhou, China

## RESEARCH INTERESTS

Conversational AI, Personality and Emotion in Dialog Systems, Summarization, Large Language Models

## PUBLICATIONS

### Journal Articles

- TOIS      **Wen, Zhiyuan**, Jiannong Cao, Jiaxing Shen, Yang Ruosong, Shuaiqi Liu, and Sun Maosong. “Personality-affected Emotion Generation in Dialog Systems.” In: *ACM Transactions on Information Systems* **Just Accepted** (2024)
- TKDE      Shuaiqi Liu, Jiannong Cao, Zhongfen Deng, Wenting Zhao, Ruosong Yang, **Wen, Zhiyuan**, and S Yu Philip. “Neural Abstractive Summarization for Long Text and Multiple Tables.” In: *IEEE Transactions on Knowledge and Data Engineering* (2023)
- IP&M      **Wen, Zhiyuan**, Jiannong Cao, Yu Yang, Haoli Wang, Ruosong Yang, and Shuaiqi Liu. “DesPrompt: Personality-descriptive prompt tuning for few-shot personality recognition.” In: *Information Processing & Management* 60.5 (2023), p. 103422
- IP&M      Shuaiqi Liu, Jiannong Cao, Ruosong Yang, and **Wen, Zhiyuan**. “Key phrase aware transformer for abstractive summarization.” In: *Information Processing & Management* 59.3 (2022), p. 102913

- WWWJ Ruosong Yang, Jiannong Cao, **Wen, Zhiyuan**, and Jiaxing Shen. “Automated post scoring: evaluating posts with topics and quoted posts in online forum.” In: *World Wide Web* 25.3 (2022), pp. 1197–1221
- TSE Cuiyun Gao, Jichuan Zeng, **Wen, Zhiyuan**, David Lo, Xin Xia, Irwin King, and Michael R Lyu. “Emerging app issue identification via online joint sentiment-topic tracing.” In: *IEEE Transactions on Software Engineering* 48.8 (2021), pp. 3025–3043
- TNNLS Fanghua Ye, Chuan Chen, **Wen, Zhiyuan**, Zibin Zheng, Wuhui Chen, and Yuren Zhou. “Homophily preserving community detection.” In: *IEEE Transactions on Neural Networks and Learning Systems* 31.8 (2019), pp. 2903–2915

### Conference Proceedings

- PerCom’ 24 **Wen, Zhiyuan**, Jiannong Cao, Yu Yang, Ruosong Yang, and Shuaiqi Liu. “Affective-NLI: Towards Accurate and Interpretable Personality Recognition in Conversation.” In: *Proceedings of IEEE International Conference on Pervasive Computing and Communications*. IEEE, 2024
- EMNLP’ 22(Findings) Shuaiqi Liu, Jiannong Cao, Ruosong Yang, and **Wen, Zhiyuan**. “Long Text and Multi-Table Summarization: Dataset and Method.” In: *Findings of the Association for Computational Linguistics: EMNLP 2022*. 2022, pp. 1995–2010
- IJCAI’ 22 Shuaiqi Liu, Jiannong Cao, Ruosong Yang, and **Wen, Zhiyuan**. “Generating a Structured Summary of Numerous Academic Papers: Dataset and Method.” In: *Proceedings of the Thirty-First International Joint Conference on Artificial Intelligence*. 2023, pp. 4259–4265
- ACL’ 21(Findings) **Wen, Zhiyuan**, Jiannong Cao, Ruosong Yang, Shuaiqi Liu, and Jiaxing Shen. “Automatically select emotion for response via personality-affected emotion transition.” In: *Findings of the Association for Computational Linguistics: ACL-IJCNLP 2021*. 2021, pp. 5010–5020
- ACL’ 21(Findings) Shuaiqi Liu, Jiannong Cao, Ruosong Yang, and **Wen, Zhiyuan**. “Highlight-transformer: Leveraging key phrase aware attention to improve abstractive multi-document summarization.” In: *Findings of the Association for Computational Linguistics: ACL-IJCNLP 2021*. 2021, pp. 5021–5027
- DASFAA’ 20 Yang, Yu\*, **Wen, Zhiyuan\***, Jiannong Cao, Jiaxing Shen, Hongzhi Yin, and Xiaofang Zhou. “EPARS: Early prediction of at-risk students with online and offline learning behaviors.” In: *Database Systems for Advanced Applications: 25th International*

*Conference, DASFAA 2020, Jeju, South Korea, September 24–27, 2020, Proceedings, Part II 25.*  
\* **indicates equal contribution.** Springer. 2020, pp. 3–19

- EMNLP' 20(Findings) Ruosong Yang, Jiannong Cao, **Wen, Zhiyuan**, Youzheng Wu, and Xiaodong He. “Enhancing automated essay scoring performance via cohesion measurement and combination of regression and ranking.” In: *Findings of the 2020 Conference on Empirical Methods in Natural Language Processing*. 2020, pp. 1560–1569
- ICBL' 20 Yu Yang, Jiannong Cao, Jiaxing Shen, Ruosong Yang, and **Wen, Zhiyuan**. “Learning analytics based on multilayer behavior fusion.” In: *Blended Learning. Education in a Smart Learning Environment: 13th International Conference, ICBL 2020, Bangkok, Thailand, August 24–27, 2020, Proceedings 13*. Springer. 2020, pp. 15–24
- LREC'20 **Wen, Zhiyuan**, Jiannong Cao, Ruosong Yang, and Senzhang Wang. “Decode with template: Content preserving sentiment transfer.” In: *Proceedings of the Twelfth Language Resources and Evaluation Conference*. 2020, pp. 4671–4679
- LREC'20 Ruosong Yang, Jiannong Cao, and **Wen, Zhiyuan**. “GGP: Glossary Guided Post-processing for Word Embedding Learning.” In: *Proceedings of the Twelfth Language Resources and Evaluation Conference*. 2020, pp. 4726–4730
- APSEC' 18 Qi Xie, **Wen, Zhiyuan**, Jieming Zhu, Cuiyun Gao, and Zibin Zheng. “Detecting duplicate bug reports with convolutional neural networks.” In: *2018 25th Asia-Pacific Software Engineering Conference (APSEC)*. IEEE. 2018, pp. 416–425

## AWARDS AND HONORS

- 2023 Best Presentation Award at PolyU Research Student Conference

## TEACHING

- 2024 Spring Guest Lecturer, Data Analysis based on Text Inputs 2 ([Slide](#)),  
COMP 5152: Advanced Data Analytics, PolyU
- 2021 Spring Teaching Assistant, COMP4146: Computational Finance, PolyU
- 2020 Spring Teaching Assistant, COMP1011: Programming Fundamentals, PolyU
- 2019 Spring Teaching Assistant, COMP4133: Information Retrieval, PolyU

2018,19,20 Fall

Teaching Assistant, COMP3011: Design and Analysis of Algorithms, PolyU

## SERVICE

### Academic Journal and Conference Peer Review

ACL, EMNLP, NAACL, IJCAI'19, AAAI'19, BigData'19

ACM Computing Surveys

Information Processing and Mangement

## INTERNSHIP

2016.9-2017.12

Research assistant at [InplusLab](#), SYSU, Guangzhou, China

Supervisor: [Prof. Zibin Zheng](#), IEEE Fellow

2018.1-2018.5

R & D Intern in Reliability Group, 2012 Lab, Huawei, Shenzhen, China

Mentor: [Dr. Jieming Zhu](#)

2017.4-2017.9

Research Student in Weixin Group, Tencent, Guangzhou, China

## SKILLS

Programming

Python, C/C++, C#, Java, JS, LaTeX, Matlab

Web

Django, Flask, Bootstrap

Deep Learning

PyTorch