# Wenjun Hou (Ethan)

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❸ Homepage: https://wjhou.github.io

# **EDUCATION**

The Hong Kong Polytechnic University (PolyU)

Hong Kong, China

Southern University of Science and Technology (SUSTech)

Shenzhen, China

Ph.D. Candidate in Computer Science

2021/09 – 2025/08 (Excepted)

- **Supervisor**: Prof. Maggie, Wenjie Li (PolyU) & Prof. Jiang Liu (SUSTech)
- Research Interests: Natural Language Processing, Multimodal Learning

China Agricultural University (CAU)

Beijing, China

MEng in Computer Science and Technology

2017/09 - 2020/06

**Guangdong University of Technology (GDUT)** 

Guangzhou, China

BEng in Computer Science and Technology

2013/09 - 2017/06

### **RESEARCH INTERESTS**

- Multimodal Learning: Radiology Report Generation, Medical VQA
- Natural Language Processing: Medical Dialogue Systems

### **PUBLICATIONS**

(\*indicates equal contribution)

### **Major Publications**

- Wenjun Hou, Yi Cheng\*, Kaishuai Xu\*, Yan Hu, Wenjie Li, and Jiang Liu. 2024. ICon: Improving Inter-Report Consistency in Radiology Report Generation via Lesion-aware Mixup Augmentation. In Findings of the Association for Computational Linguistics: EMNLP 2024 (EMNLP'24 Findings).
- Wenjun Hou, Yi Cheng\*, Kaishuai Xu\*, Wenjie Li, and Jiang Liu. 2023. Recap: Towards Precise Radiology Report Generation via Dynamic Disease Progression Reasoning. In *Findings of the Association for Computational Linguistics: EMNLP 2023 (EMNLP'23 Findings)*.
- Wenjun Hou, Kaishuai Xu\*, Yi Cheng\*, Wenjie Li, and Jiang Liu. 2023. ORGAN: Observation-Guided Radiology Report Generation via Tree Reasoning. In *Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics (ACL'23)*.
- Ying Chen, Wenjun Hou, Shoushan Li, Caicong Wu, and Xiaoqiang Zhang. 2020. End-to-End Emotion-Cause Pair Extraction with Graph Convolutional Network. In *Proceedings of the 28th* International Conference on Computational Linguistics (COLING'20).
- Ying Chen, Wenjun Hou, Xiyao Cheng, and Shoushan Li. 2018. Joint Learning for Emotion Classification and Emotion Cause Detection. In Proceedings of the 2018 Conference on Empirical Methods in Natural Language Processing (EMNLP'18).

#### Other Publications

 Kaishuai Xu, Yi Cheng\*, Wenjun Hou\*, Qiaoyu Tan, Wenjie Li. 2024. Reasoning Like a Doctor: Improving Medical Dialogue Systems via Diagnostic Reasoning Process Alignment. In Findings of the Association for Computational Linguistics: ACL 2024 (ACL'24 Findings).  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 (ACL'23 Findings).

### **PREPRINTS**

(\*indicates equal contribution)

- Yi Cheng, Wenge Liu, Kaishuai Xu, Wenjun Hou, Yi Ouyang, Chak Tou Leong, Xian Wu, Yefeng Zheng. 2024. Evolving to be Your Soulmate: Personalized Dialogue Agents with Dynamically Adapted Personas. arXiv:2406.13960.
- Kaishuai Xu, **Wenjun Hou**\*, Yi Cheng\*, Jian Wang, Wenjie Li. 2024. Medical Dialogue Generation via Intuitive-then-Analytical Differential Diagnosis. *arXiv*:2401.06541.

### RESEARCH EXPERIENCES

# **Towards Clinically Precise, Accurate, and Consistent Radiology Report Generation**PolyU Ph.D. Student 2022/07 – 2024/02

- Proposed an observation-guided report generation framework, aiming to improve the accuracy of generated reports (ORGAN@ACL'23).
- Introduced attribute modeling with spatial and temporal information for precise report generation (Recap@EMNLP'23 Findings).
- Designed evaluation metrics to measure the inter-report consistency and proposed a lesion-aware mixup for consistent report generation (ICon@EMNLP'24 Findings).

### Multimodal LLMs for Medical VQA

**SUSTech** 

Ph.D. Student 2023/09 – Present Ongoing

### **Emotion and Cause Analysis**

CAU

*Master Student* 2017/09 – 2020/06

Proposed a joint framework for emotion classification and emotion cause detection (EMNLP'18).
 Devised a PairGCN for emotion-cause pair extraction with GCN for dependency modeling (PairGCN@COLING'20).

### **HONORS & AWARDS**

<ul> <li>National Scholarship for Graduates at CAU</li> </ul>	2018
First Class of Academic Scholarship at CAU	2018
<ul> <li>First Class of Academic Scholarship at GDUT</li> </ul>	2016
<ul> <li>Third Class of Academic Scholarship at GDUT</li> </ul>	2015

## **PROFESSIONAL ACTIVITIES**

### **Conference Reviewer**

EMNLP Industry (2024), ACL ARR (2024), EMNLP (2023, 2022), COLING (2025, 2024, 2022)

### **Teaching Assistant**

COMP4424 Extended Reality: Theory and Practice, TA, PolyU

Spring 2023

 COMP2S01 Technology Beyond Borders: Service Learning Across Cultural, Ethnic and Community Lines, TA, PolyU
 Fall 2021, Spring & Fall 2022

Computational Methods, TA, CAU

Fall 2019

# TECHNICAL SKILLS

Python, C/C++, Java, Shell, SQL, HTML, CSS, JavaScript PyTorch, Tensorflow, Git, LATEX, Markdown, Vim Mandarin, Cantonese, English • Coding:

• Tools:

• Langs: