Wai-Chung Kwan, Cyrus

EDUCATION

The Chinese University of Hong Kong

Aug. 2020 – Present

Doctor of Philosophy (PhD) in Systems Engineering and Engineering Management Supervised by Prof. Kam-Fai Wong

Hong Kong Baptist University

Aug. 2015 - Aug. 2019

Bachelor of Science (Hons) in Computer Science

Minor in Statistics

- Dean's List (2018/19; 2017/18)
- Outstanding Student Scholarship (2016/17)

EXPERIENCE

Visiting Researcher

April 2024 - July 2024

King's College London

Perform research on improving social reasoning.

Research Intern

Jun. 2023 – Feb. 2024

Huawei Noah's Ark Lab

• Construct two benchmarks to evaluate LLM capabilities.

Research Assistant (Full Time)

Aug. 2019 - Aug. 2020

Hong Kong Baptist University

- Perform text analysis on social media data(e.g. lihkg forum)
- Develop model for different NLP projects
 - o News Headline Generation
 - o Cantonese Word Segmentation

Data Scientist (Intern)

May. 2018 – Aug. 2018

MultiMedia Big Data Analytics Limited

- Develop Natural Language Processing Deep Learning models
 - o Sentiment Analysis, Information Extraction etc.
- Devise better data-driven models of human behavior
- Take part in researches to advance the science and technology of intelligent machines.

Research Assistant (Part Time)

Jan. 2018 – May. 2019

Hong Kong Baptist University

- Data cleaning and processing for some text mining research.
- Apply statistics model and machine learning model to data
- Sentiments analysis in social media

PUBLICATIONS (* indicates equal contribution)

1. MT-Eval: A Multi-Turn Capabilities Evaluation Benchmark for Large Language Models

Wai-Chung Kwan, Xingshan Zeng, Yuxin Jiang, Yufei Wang, Liangyou Li, Lifeng Shang, Xin Jiang, Qun Liu, and Kam-Fai Wong

Empirical Methods in Natural Language Processing (EMNLP), 2024.

2. M4LE: A Multi-Ability Multi-Range Multi-Task Multi-Domain Long-Context Evaluation Benchmark for Large Language Models

Wai-Chung Kwan, XingShan Zeng, Yufei Wang, Yusen Sun, Liangyou li, Lifeng Shang, Qun Liu, and Kam-Fai Wong.

Annual Meeting of the Association for Computational Linguistics (ACL), 2024. [Outstand Paper Award]

3. <u>JoTR: A Joint Transformer and Reinforcement Learning Framework for Dialog Policy Learning</u> **Wai-Chung Kwan***, Huimin Wang*, Hongru Wang, Zezhong Wang, Xian Wu, Yefeng Zheng, and Kam-Fai Wong.

International Conference on Computational Linguistics (COLING), 2024

4. <u>Dialog Action-Aware Transformer for Dialog Policy Learning</u>

Huimin Wang*, Wai-Chung Kwan*, and Kam-Fai Wong.

Annual Meeting of the Special Interest Group on Discourse and Dialogue (SIGDIAL), 2023.

5. CoAD: Automatic Diagnosis through Symptom and Disease Collaborative Generation

Huimin Wang*, Wai-Chung Kwan*, and Kam-Fai Wong.

Annual Meeting of the Association for Computational Linguistics (ACL), 2023.

6. <u>A Survey on Recent Advances and Challenges in Reinforcement Learning Methods for Task-oriented Dialogue Policy Learning</u>

Wai-Chung Kwan*, Hongru Wang*, Huimin Wang, and Kam-Fai Wong.

Machine Intelligence Research (2023).

7. Large Language Models as Source Planner for Personalized Knowledge-grounded Dialogue

Hongru Wang, Minda Hu, Yang Deng, Rui Wang, Fei Mi, Weichao Wang, Yasheng Wang, Wai-Chung Kwan, Irwin King, and Kam-Fai Wong.

Findings of Empirical Methods in Natural Language Processing (EMNLP), 2023.

8. ReadPrompt: A Readable Prompting Method for Reliable Knowledge Probing

Zezhong Wang, Luyao Ye, Hongru Wang, **Wai-Chung Kwan**, David Ho, and Kam-Fai Wong. Findings of Empirical Methods in Natural Language Processing (EMNLP), 2023.

0. Towards Robust Parsonalized Dialogue Congretion via Order Insensitive Representati

9. Towards Robust Personalized Dialogue Generation via Order-Insensitive Representation Regularization Liang Chen, Hongru Wang, Yang Deng, **Wai-Chung Kwan**, Zezhong Wang, and Kam-Fai Wong. Findings of the Association for Computational Linguistics (ACL), 2023.

- 10. MCML: A Novel Memory-based Contrastive Meta-Learning Method for Few Shot Slot Tagging Hongru Wang, Zezhong Wang, **Wai-Chung Kwan**, and Kam-Fai Wong Conference of the Asia-Pacific Chapter of the Association for Computational Linguistics (AACL), 2023.
- 11. <u>Prior Omission of Dissimilar Source Domain(s) for Cost-Effective Few-Shot Learning</u> Zezhong Wang*, Hongru Wang*, **Wai-Chung Kwan**, and Kam-Fai Wong. International Conference on Natural Language and Speech Processing (ICNLSP), 2022.
- 12. <u>Using Time-Series Patterns in Word Segmentation for Data Pre-Processing: A Methodological Development in Evolving Public Discourse Mining</u>

Yin Zhang, **Wai-Chung Kwan**, Wai-Yeung Ho, Chi-Chi Tong, and Tsz-Ho Hui. Conference of International Communication Association (ICA), 2020.