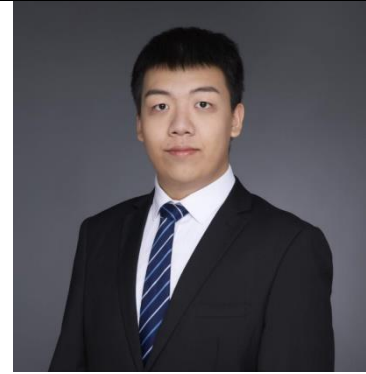


Weiqi, Wang 王伟琪 Mighty

2000/08 UG-Year3

Last Updated: 2021/2/25



1. Education

- *Sep. 2018 – Now* **The Hong Kong University of Science and Technology** (CGA: **3.895**/4.300)
 - ◆ First Major: **Bachelor's Degree in Computer Science** (CGA: **3.900**/4.300)
 - ◆ Second Major: **Bachelor's Degree in Mathematics** (CGA: **3.986**/4.300)
 - ◆ Self-Learning: Programming with Python @Coursera, CS224N, CS231N @Stanford University Website
- *Sep. 2015 – Jun. 2018* **The Beijing No.8 Middle School** (Rank: **5**/306)
 - ◆ High School's Diploma in Science

2. Research Experience

- **Commonsense Knowledge Base Population**
(Undergraduate Research Assistant)
(Supervisor: [Prof. Yangqiu Song](#), HKUST, Jan. 2021 – May. 2021)
 - * We aim to populating the current commonsense knowledge bases including ATOMIC, ConceptNet, Probase, Glucose with ASER to generate a unified knowledge base under a consistent schema.
 - * Details of this project will be made public in April/May 2021 once submitted to Arxiv.
 - * To be submitted to EMNLP2021.
- **DISCOS: Bridging the Gap between Discourse Knowledge and Commonsense Knowledge**
(Undergraduate Research Assistant)
(Supervisor: [Prof. Yangqiu Song](#), HKUST, Sep. 2020 – Dec. 2020)
 - * We propose an alternative commonsense knowledge acquisition framework **DISCOS** (from DIScourse to COMmonSense), which automatically mines expensive complex commonsense knowledge from more affordable linguistic knowledge resources.
 - * Experiments demonstrate that we can successfully convert discourse knowledge over eventualities from ASER, a large-scale discourse knowledge graph, into inferential if-then commonsense knowledge defined in ATOMIC without any additional annotation effort.
 - * Further study suggests that DISCOS significantly outperforms previous supervised approaches in terms of novelty and diversity with comparable quality.
- **Data-driven Smart Assessment of Room Air Conditioner Efficiency for Saving Energy**
(Undergraduate Research Assistant)
(Supervisor: [Prof. Zhongming Lu](#), HKUST, Jun. 2020 – Jan. 2021)
 - * We present a machine learning approach to identify non-inverter window air conditioners with low efficiency using climate data and smart meter data from the university student hall rooms.
 - * Our result shows that the accuracy of XGBoost is 50~70% in estimating the hourly electricity consumption within a 10% error deviation range from the actual data.
 - * We conclude that the AC is highly efficient if the predicted hourly electricity consumption increases as the outdoor temperature rises. In contrast, the AC efficiency is rated low-efficiency if the change of

outdoor temperature does not affect the prediction of the hourly electricity consumption. This conclusion is further verified by the AC replacement record.

3. Publications

➤ Commonsense Knowledge Base Population

To be submitted to Empirical Methods of Natural Language Processing, 2021 (EMNLP2021)

➤ DISCOS: Bridging the Gap between Discourse Knowledge and Commonsense Knowledge

(Tianqing Fang, Hongming Zhang, **Weiqi Wang**, Yangqiu Song, Bin He)

Published in the Proceedings of **The Web Conference, 2021 (WWW2021)** (357/1736=20.56%)

[Link to the paper](#), [link to the code](#)

➤ Data-driven Smart Assessment of Room Air Conditioner Efficiency for Saving Energy

(**Weiqi Wang**, Zixuan Zhou, Zhongming Lu)

Under Review in **Applied Energy (APEN)** (IF=8.848)

[Link to the code](#)

4. Campus Experience

➤ Subcommittee of Mainland Scholar and Students Society Undergraduate (MSSSUG)

(Sep. 2018 – Dec. 2018)

- * Helped making the annual plan of the entire society.
- * Hosted several society functions.

➤ Student Teaching Helper in COMP1022P (CSE Department)

(Sep. 2019 – Nov. 2019)

- * Grade student's lab work and answer their questions.

➤ School of Engineering's Representative in Admission Interview (School of Engineering)

(Jan. 2020, Jul. 2020, Jan. 2021)

- * Share my experience in HKUST as the representative of School of Engineering and answer their questions on admissions and studying & living in HKUST.

5. Language and Skills

➤ **Language:** English (advanced), Mandarin (native), Cantonese (beginner)

➤ **Skills:**

- * **Advanced:** Python, **Proficient:** C++, Java, **Basic:** HTML5, JavaScript
- * **Proficient** with PyTorch, TensorFlow, Keras, Scikit-Learn
- * **Currently working on Knowledge graphs and GNNs.**

6. Scholarships and Honors

➤ **Dean's List for the School of Engineering** in Fall 2018, Fall 2019, Fall 2020.

➤ **University's Scholarship Scheme for Continuing Undergraduate Students** in 2019-2020 and 2020-2021

7. Contact Me!

- This email: 1874240442@qq.com will be active all the time!
- You are also welcomed to visit my personal webpage <https://mighty-weaver.github.io/>!
- My current address is Room3007, Cheng Yu Tung Building, HKUST, Sai Kung, Hong Kong SAR, China