

# Weiqi Wang (Mighty)

(+852)54837404 or (+86)15313262230 | [1874240442@qq.com](mailto:1874240442@qq.com) | <https://mighty-weaver.github.io/> |

## EDUCATION

**The Hong Kong University of Science and Technology** Kowloon, Hong Kong SAR, China  
*Bachelor in Computer Science and Mathematics (Double Major) CGA: 3.86/4.3* Sep. 2018 – Now  
**Beijing No.8 Middle School** Beijing, China  
*High School's Diploma in Science Rank: 5/306* Sep. 2015 – Jun. 2018

## RESEARCH EXPERIENCE

**[EMNLP2021] Benchmarking CKGP with evaluation dataset** Jan. 2021 – Sep. 2021  
*Supervised by Prof. Yangqiu Song* HKUST, Hong Kong SAR, China  

- Preprocess eventuality KG ASER, FrameNet, Knowlywood, extract eventualities from CSKB Glucose. Align CSKB to ASERs by defining specific matching rules.
- Improve the proposed *KGBertSage* model structure and increased the performance of *BertSage* model.

**[WWW2021] DISCOS** Sep. 2020 – Dec. 2020  
*Supervised by Prof. Yangqiu Song* HKUST, Hong Kong SAR, China  

- Reproduce all the baseline models. Analyze the knowledge generated by COMET and propose the defects of COMET model, such as low in novelty, redundant knowledge.
- Improve COMET's beam search logic to make it comply with the classical beam search settings.
- All the annotations by using Amazon Turker to evaluate the quality of our generated knowledge. Report statistics and help write the paper.

**[JCLEPRO] Data-driven Assessment of Air Conditioner Efficiency** Jun. 2020 – Jan. 2021  
*Supervised by Prof. Zhongming Lu* HKUST, Hong Kong SAR, China  

- Preprocess over one million data and integrate data of different categories from multiple sensors.
- Implement multiple machine learning algorithms to train the models for each separate room. Algorithms ranges from the basic kernel regression such as SVM to deep learning. The final choice is XGBoost by Tianqi Chen.
- Use Shapley Additive Explanation to explain the models and analyze the impact of all the variables to the regression result.

## PUBLICATIONS

**Benchmarking Commonsense Knowledge Base Population with an Effective Evaluation Dataset**  
*Tianqing Fang\*, Weiqi Wang\*, Sehyun Choi, Shibo Hao, Hongming Zhang, Yangqiu Song, Bin He*  

- Published in the Proceedings of **The 2021 Conference on Empirical Methods in Natural Language Processing (EMNLP2021)** (Main Conference)
- ~~Link to the paper~~ (not available yet) | [Link to the code](#)

**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 at the **Journal of Cleaner Production**
- ~~Link to the paper~~ (not available yet) | [Link to the code](#)

## SKILLS

**Languages:** English (Advanced), Mandarin (Native), Cantonese (Beginner)  
**Programming Languages:** Python (Advanced), C++ java (Proficient), HTML5 JavaScript (Basic)  
**Frameworks:** PyTorch, Tensorflow, Keras, Scikit-learn, Amazon Mechanical Turker  
**Libraries:** pandas, NumPy, Matplotlib, seaborn, Spacy

## AWARDS

**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, 2020-2021