# Weiwen LIU

(852) 56486571 **3** (86) 14715022731 ⋈ wwliu@cse.cuhk.edu.hk https://liuweiwen1995.github.io/

## Education

2016–Present **PhD, Computer Science**, The Chinese University of Hong Kong, Hong Kong.

Supervised by Prof. Pheng-Ann Heng and Prof. Shengyu Zhang.

Research interests include machine learning algorithms and recommender systems

2013–2016 **BS, Computer Science**, South China University of Technology, Guangzhou. GPA – 3.87/4.00 (rank 3rd in All-English-Teaching Union Class)

### **Publications**

Weiwen Liu, Jun Guo, Nasim Sonboli, Robin Burke, Shengyu Zhang, Personalized Fairness-aware Re-ranking for Microlending, Proceedings of the 13th ACM Conference on Recommender Systems. ACM.

Junyang Chen, Zhiguo Gong, Weiwen Liu, A Nonparametric Model for Online Topic Discovery with Word Embeddings, Information Sciences 504 (2019): 32-47.

Weiwen Liu, Ruiming Tang, Jiajin Li, Jinkai Yu, Huifeng Guo, Xiuqiang He, and Shengyu Zhang, Field-aware Probabilistic Embedding Neural Network for CTR Prediction, Proceedings of the 12th ACM Conference on Recommender Systems (pp. 412-416). ACM.

Weiwen Liu, and Robin Burke, Personalizing Fairness-aware Re-ranking, 2nd FATREC Workshop on Responsible Recommendation.

Weiwen Liu, Shuai Li, and Shengyu Zhang, Contextual Dependent Click Bandit Algorithm for Web Recommendation, International Computing and Combinatorics Conference, Springer, Cham, 2018.

Patrick P. K. Chan, Weiwen Liu, Danni Chen, Daniel S. Yeung, Fei Zhang, Xizhao Wang, and Chien-Chang Hsu, Face liveness detection using a flash against 2D spoofing attack, IEEE Transactions on Information Forensics and Security 13, no. 2 (2018): 521-534.

#### In submission

Weiwen Liu, Feng Liu, Benben Liao, Ruiming Tang, Guangyong Chen, Shengyu Zhang, FairRec: Long-term Fairness-aware Recommendation with Reinforcement Learning.

Pengfei Chen, Weiwen Liu, Guangyong Chen, Chang-Yu Hsieh, Shengyu Zhang, Utilizing Edge Features in Graph Neural Networks via Variational Information Maximization.

Guangyong Chen, Pengfei Chen, Chang-Yu Hsieh, Chee-Kong Lee, Benben Liao, Renjie Liao, **Weiwen Liu**, Jiezhong Qiu, Qiming Sun, Jie Tang, Richard Zemel, Shengyu Zhang, *Alchemy: A Quantum Chemistry Dataset for Benchmarking Al Models*, (alphabetical order).

Xiaojin Zhang, Shuai Li, **Weiwen Liu**, Shengyu Zhang, *Contextual Combinatorial Conservative Bandits*.

# **Experiences**

- Jun-Sep, Visiting student at Texas A&M University, working together with Prof. James Caverlee 2019 on the problem of complementary item recommendation with graph neural networks.
- Sep—Dec, Research intern at Tencent Quantum Lab, working on the problem of designing graph 2018 neural networks for quantum chemistry.
- May–Aug, Visiting student at DePaul University, working together with Prof. Robin Burke on the 2018 problem of the fairness issue in multi-stakeholder recommender systems.

# Conferences, Workshops and Summer Schools Attended

RecSys, 2019 (Poster)

RecSys, 2018 (Poster and Workshop (Oral))

NIPS, 2017

International Summer School on Deep Learning, 2017

ICMLC & ICWAPR 2013-2016 (Oral)

#### Professional Services

Sub-reviewer for IJCAI 2018

Reviewer for TKDE

## **Awards**

- 2015 Top 10 Outstanding Students at SCUT (rank 1st, highest award for students at SCUT)
- 2014 National Scholarship (highest national-wide scholarship)

# **Programming Skills**

Python, C++, Java, MySQL, MatLab