

Weiwen LIU

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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

- [C1] **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.
- [C2] Yun He, Yin Zhang, **Weiwen Liu** and James Caverlee, *Consistency-Aware Recommendation for User-Generated Item List Continuation*, Proceedings of the 13th ACM International WSDM Conference. ACM.
- [J1] Junyang Chen, Zhiguo Gong, **Weiwen Liu**, *A Nonparametric Model for Online Topic Discovery with Word Embeddings*, Information Sciences 504 (2019): 32-47.
- [C3] **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.
- [W1] **Weiwen Liu**, and Robin Burke, *Personalizing Fairness-aware Re-ranking*, 2nd FATREC Workshop on Responsible Recommendation.
- [C4] **Weiwen Liu**, Shuai Li, and Shengyu Zhang, *Contextual Dependent Click Bandit Algorithm for Web Recommendation*, International Computing and Combinatorics Conference, Springer, Cham, 2018.
- [J2] 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

- [1] **Weiwen Liu**, Yin Zhang, Jianling Wang, Yun He, James Caverlee and Pheng-Ann Heng, *IRGNN: Discovering Item Relationships with Multi-Hop Connections for E-commerce*.

- [2] **Weiwen Liu**, Feng Liu, Benben Liao, Ruiming Tang, Guangyong Chen, Shengyu Zhang, *FairRec: Long-term Fairness-aware Recommendation with Reinforcement Learning*.
- [3] Pengfei Chen, **Weiwen Liu**, Guangyong Chen, Chang-Yu Hsieh, Shengyu Zhang, *Utilizing Edge Features in Graph Neural Networks via Variational Information Maximization*.
- [4] 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 AI Models*.
- [5] Xiaojin Zhang, Shuai Li, **Weiwen Liu**, Shengyu Zhang, *Contextual Combinatorial Conservative Bandits*.

Experiences

- Jun–Sep, 2019 Visiting student at Texas A&M University, working together with Prof. James Caverlee on the problem of complementary item recommendation with graph neural networks.
- Sep–Dec, 2018 Research intern at Tencent Quantum Lab, working on the problem of designing graph neural networks for quantum chemistry.
- May–Aug, 2018 Visiting student at DePaul University, working together with Prof. Robin Burke on the problem of the fairness issue in multi-stakeholder recommender systems.
- 2017-2018 Collaborative project with Huawei Noah's Ark Lab on the problem of recommendation with multi-armed bandits for App Store.

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

- 2019 Teaching Assistant Award of Merits
- 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