Peijie Sun

Resume

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 Github in *Linkedin*

I am currently a **postdoctoral** researcher at the Department of Computer Science and Technology, Tsinghua University, in Beijing, China. I am now working on recommendation algorithms, user modeling, social network modeling, and LLM-based recommendation research. My research interests include **recommendation algorithms, user modeling, social network modeling, and LLM-based recommendation research**. I have published 20+ papers at the top international AI conferences, such as WWW, KDD, and SIGIR, and AI Journals, such as IEEE TKDE, IEE TMM, and ACM TOIS. As of April 22, 2024, Google Scholar shows that my work has received **1232** citations. My WWW 2024 work achieved a **50.65%** increase in online revenue on Huawei HiMedia, and an **18.43%** uplift in traffic across Huawei-related business scenarios.

Education

2018–2022 : **PhD, Signal and Information Processing, School of Computer Science and Information Engineering**, *Hefei University of Technology*, Hefei, China.

Advisors : **Dr. *Le Wu*** & **Dr. *Meng Wang***, I have remained consistent with my advisor from my master's phase.

2015–2018 : **Master, Signal and Information Processing, School of Computer Science and Information Engineering**, *Hefei University of Technology*, Hefei, China.

Advisors : **Dr. *Le Wu*** & **Dr. *Meng Wang***, they both are *Professor of School of Computer Science and Information Engineering*, Hefei University of Technology, Hefei, China.

2011–2015 : **Undergraduate, Electronic Information Science and Technology,**, *Hefei University of Technology*, Hefei, China).

Publications

Journal Articles

2023 **Peijie Sun**, Le Wu, Kun Zhang, Xiangzhi Chen, and Meng Wang. Neighborhood-enhanced supervised contrastive learning for collaborative filtering. *IEEE TKDE*, volume 36, pages 2069–2081, 2023.

2023 Kang Liu, Feng Xue, Dan Guo, **Peijie Sun**, Shengsheng Qian, and Richang Hong. Multimodal graph contrastive learning for multimedia-based recommendation. *IEEE TMM*, volume 25, pages 9343–9355, 2023.

2021 **Peijie Sun**, Le Wu, Kun Zhang, Yu Su, and Meng Wang. An unsupervised aspect-aware recommendation model with explanation text generation. *ACM TOIS*, volume 40, pages 63:1–63:29, 2021.

2020 Le Wu, Junwei Li, **Peijie Sun**, Richang Hong, Yong Ge, and Meng Wang. Diffnet++: A neural influence and interest diffusion network for social recommendation. *IEEE TKDE*, volume 34, pages 4753–4766, 2020.

2018 Le Wu, **Peijie Sun**, Richang Hong, Yong Ge, and Meng Wang. Collaborative neural social recommendation. *IEEE Trans. Syst. Man Cybern. Syst.*, volume 51, pages 464–476, 2018.

In Conference Proceedings

2024   Shaorun Zhang, Zhiyu He, Ziyi Ye, **Peijie Sun**, Qingyao Ai, Min Zhang, and Yiqun Liu. Eeg-svrec: An eeg dataset with user multidimensional affective engagement labels in short video recommendation. *SIGIR*, 2024.

2024   Shenghao Yang, Weizhi Ma, **Peijie Sun**, Min Zhang, Qingyao Ai, Yiqun Liu, and Mingchen Cai. Common sense enhanced knowledge-based recommendation with large language model. *DASFAA*, 2024.

2024   Shenghao Yang, Weizhi Ma, **Peijie Sun**, Qingyao Ai, Yiqun Liu, Mingchen Cai, and Min Zhang. Sequential recommendation with latent relations based on large language model. *SIGIR*, 2024.

2024   Yifan Wang, **Peijie Sun**, Weizhi Ma, Min Zhang, Yuan Zhang, Peng Jiang, and Shaoping Ma. Intersectional two-sided fairness in recommendation. *WWW*, 2024.

2024   **Peijie Sun**, Yifan Wang, Min Zhang, Chuhan Wu, Yan Fang, Hong Zhu, Yuan Fang, and Meng Wang. Collaborative-enhanced prediction of spending on newly downloaded mobile games under consumption uncertainty. WWW, 2024.

2024   Jiayu Li, **Peijie Sun**, Chumeng Jiang, Weizhi Ma, Qingyao Ai, and Min Zhang. A situation-aware enhancer for personalized recommendation. *DASFAA*, 2024.

2024   Hanyu Li, Weizhi Ma, **Peijie Sun**, Jiayu Li, Cunxiang Yin, Yancheng He, Guoqiang Xu, Min Zhang, and Shaoping Ma. Aiming at the target: Filter collaborative information for cross-domain recommendation. *SIGIR*, 2024.

2023   Yifan Wang, **Peijie Sun**, Min Zhang, Qinglin Jia, Jingjie Li, and Shaoping Ma. Unbiased delayed feedback label correction for conversion rate prediction. In *KDD*, pages 2456–2466. ACM, 2023.

2023   Jie Shuai, Le Wu, Kun Zhang, **Peijie Sun**, Richang Hong, and Meng Wang. Topic-enhanced graph neural networks for extraction-based explainable recommendation. In *SIGIR*, pages 1188–1197. ACM, 2023.

2023   Jiayu Li, **Peijie Sun**, Zhefan Wang, Weizhi Ma, Yangkun Li, Min Zhang, Zhoutian Feng, and Daiyue Xue. Intent-aware ranking ensemble for personalized recommendation. In *SIGIR*, pages 1004–1013. ACM, 2023.

2023   Zhiyu He, Shaorun Zhang, **Peijie Sun**, Jiayu Li, Xiaohui Xie, Min Zhang, and Yiqun Liu. Understanding user immersion in online short video interaction. In *CIKM*, pages 731–740. ACM, 2023.

2022   Jie Shuai, Kun Zhang, Le Wu, **Peijie Sun**, Richang Hong, Meng Wang, and Yong Li. A review-aware graph contrastive learning framework for recommendation. In *SIGIR*, pages 1283–1293. ACM, 2022.

2022   Tao Qi, Fangzhao Wu, Chuhan Wu, **Peijie Sun**, Le Wu, Xiting Wang, Yongfeng Huang, and Xing Xie. Profairrec: Provider fairness-aware news recommendation. In *SIGIR*, pages 1164–1173. ACM, 2022.

2022   Suchang Luo, Yonghui Yang, Kun Zhang, **Peijie Sun**, Le Wu, and Richang Hong. Self-supervised cross domain social recommendation. In *ICCAI*, pages 286–292. ACM, 2022.

2021   Jingyu Peng, Le Wu, **Peijie Sun**, and Meng Wang. Meta-learned ID embeddings for online inductive recommendation. In *CCIR*, volume 13026, pages 32–44. Springer, 2021.

2020   **Peijie Sun**, Le Wu, Kun Zhang, Yanjie Fu, Richang Hong, and Meng Wang. Dual learning for explainable recommendation: Towards unifying user preference prediction and review generation. In *WWW*, pages 837–847. ACM, 2020.

2019   Le Wu, **Peijie Sun**, Yanjie Fu, Richang Hong, Xiting Wang, and Meng Wang. A neural influence diffusion model for social recommendation. In *SIGIR*, pages 235–244. ACM, 2019.

2018   **Peijie Sun**, Le Wu, and Meng Wang. Attentive recurrent social recommendation. In *SIGIR*, pages 185–194. ACM, 2018.

2018   Hongfeng Bao, Le Wu, and **Peijie Sun**. Contextual attention model for social recommendation. In *PCM*, volume 11165, pages 630–641. Springer, 2018.

Work and Internship

July,2022 –
present
: **Postdoc.**, *DCST, Tsinghua University*, Beijing, China.
Developing explainable techniques to understand users' decision-making mechanisms and social behaviors.

Advisor :
: **Dr. *Min Zhang***, Professor, DCST, Tsinghua University, Beijing, China

May,2021 –
July,2021
: **Student Intern.**, *Social Computing Group, MSRA*, Beijing, China.
Applying the SOTA news recommendation algorithm to the news recommendation task and the advertising recommendation task. And developing news recommendation algorithms.

Advisor :
: **Dr. *Fangzhao Wu***, Researcher, Social Computing Group, MSRA, Beijing, China

Dec,2018 –
July,2019
: **Visiting Student**, *Missouri University of Science and Technology*, Rolla, MO, USA.
Developing explainable recommendation algorithms.

Advisor :
: **Dr. *Yanjie Fu***, *Associate Professor, School of Computing and AI*, Arizona State University

Fellowships & Awards

2022.07   ***China Postdoctoral Science Foundation Special Funding for the 4th Batch (Pre-Station)***.

2024.04   ***Excellent doctoral dissertation of Anhui Province*** in China.

2020.12   Awarded under ***National Scholarship for Doctoral Students*** in China (***Top 1%***).

2019.07   Awarded under ***Travel Grant*** at the ***The 42nd International ACM SIGIR Conference on Research and Development in Information Retrieval***.

2018.07   Awarded under ***Travel Grant*** at the ***The 41st International ACM SIGIR Conference on Research and Development in Information Retrieval***.