TIANFU WANG

Homepage · tianfuwang.cs@gmail.com · (+86) 18678542686 · GeminiLight

EDUCATION

University of Science and Technology of China (USTC) 2022 – Present

M.S. in Computer Science (CS). Supervised by Prof. Hui Xiong (AAAS & IEEE Fellow).
Research interests include Data Mining, Reinforcement Learning, and Large Language Model.

Chongqing University (CQU) 2018 – 2022

B.S. in Software Engineering (SE). Rank: 6/254 (Top 3%). GPA: 3.78/4.00; Grade: 90.11.

EXPERIENCE

Microsoft Inc. - Research Intern (Mentor: Dr. Nicholas Jing Yuan) 2024.05 – NOW

Work on large language models (LLM) for education with human evaluation.

HKUST-GZ - Research Assistant (Mentor: Prof. Chao Wang) 2024.03 – 2024.05

Investigate the large language models (LLM) for the recommendation system.

MSRA - Research Intern (Mentor: Dr. Jianxun Lian) 2023.08 – 2023.12

Explore the application of LLM-based agents in education scenarios.

Microsoft Inc. - Research Intern (Mentor: Dr. Nicholas Jing Yuan) 2022.06 – 2023.12

Work on data-driven non-fungible token (NFT) valuation [1] and profit-aware generation [5].

JD.COM Inc. - Research Intern (Mentor: Prof. Li Shen) 2021.08 – 2022.04

Focus on machine learning for combinatorial optimization (CO) in cloud computing [3].

CQU-CPS Lab - Research Assistant (Mentor: Prof. Qilin Fan) 2019.10 – 2021.08

Study the deployment of online service function chains in network virtualization (NV) scenarios [4].

SKILLS

- **Algorithm**: Graph Learning; Reinforcement Learning; Combinatorial Optimization; FinTech; Multimedia
- **Development**: Backend (Django; SpringBoot); Frontend (Vue; React); SQL; Smart Contract (Solidity)
- **Others**: CET-4 & 6; Slide Making; Video Editing; Photography; Marathon Running; Music

AWARDS

***Outstanding Undergraduate Thesis, Chongqing City* (2023)**; *Smart Dock Future Star, Huawei Inc.*(2021); *Outstanding Student, CQU* (2022); *Excellent Student, CQU* (2019);

National Scholarship (2021); *Zhu-Jingwen Scholarship (2020)*; *National Encouragement Scholarship (2019)*; *First-class Graduate Student Scholarship, USTC* (2022); *Excellent Student Scholarship* × *4, CQU*;

National First Prize, China Collegiate Computing Contest - Network Technology Challenge (2021)
M Prize, International Mathematical Contest in Modeling (2021);

MISCELLANEOUS

- A prospective member of *Datawhale*, a well-known open-source organization, and a core contributor to the *Statistical Learning Method Problem Solving* project (Star 1K+)
- Independently developed the NV resource allocation library, *Virne* (Star 70+) and maintains the paper collection in this field (Star 90+).

- Participated in the AI Exchange program of the *University of Cambridge* and the Intelligent Computing visiting program of the *University of Tokyo* and *Waseda University*

PUBLICATIONS

[1] **Tianfu Wang**, Liwei Deng, Chao Wang, Jianxun Lian, Yue Yan, Nicholas Jing Yuan, Qi Zhang, and Hui Xiong. Comet: Nft price prediction with wallet profiling. In *ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (**KDD**)*, 2024. **(CCF-A, CORE A*)**.

[2] **Tianfu Wang**, Qilin Fan, Chao Wang, Leilei Ding, Nicholas Jing Yuan, and Hui Xiong. Flagvne: A flexible and generalizable rl framework for network resource allocation. In *International Joint Conference on Artificial Intelligence (**IJCAI**)*, 2024. **(CCF-A, CORE A*)**.

[3] **Tianfu Wang**, Shen Li, Qilin Fan, Tong Xu, Liu Tongliang, and Xiong Hui. Joint admission control and resource allocation of virtual network embedding via hierarchical deep reinforcement learning. *IEEE Transactions on Services Computing (**TSC**)*, 2023. **(CCF-A, CORE A*, JCR-Q1)**.

[4] **Tianfu Wang**, Qilin Fan, Xiuhua Li, Xu Zhang, Qingyu Xiong, Shu Fu, and Min Gao. Drl-sfcp: Adaptive service function chains placement with deep reinforcement learning. In *IEEE International Conference on Communications (**ICC**)*, 2021. **(CCF-C, CORE B)**.

[5] Huiguo He, **Tianfu Wang**, Huan Yang, Jianlong Fu, Nicholas Jing Yuan, Jian Yin, Hongyang Chao, and Qi Zhang. Learning profitable nft image diffusions via multiple visual-policy guided reinforcement learning. In *ACM International Conference on Multimedia (**MM**)*, 2023. **(CCF-A, CORE A*)**.

[6] Leilei Ding, Dazhong Shen, Chao Wang, **Tianfu Wang**, Le Zhang, and Yanyong Zhang. Dgr: A general graph desmoothing framework for recommendation via global and local perspectives. In *International Joint Conference on Artificial Intelligence (**IJCAI**)*, 2024. **(CCF-A, CORE A*)**.

[7] Qilin Fan, Yue Niu, **Tianfu Wang**, Xiuhua Li, and Jinlong Hao. Gat-il: A service function chain deployment method based on graph attention network and imitation learning. *Acta Electronica Sinica*, 2023. **(CCF-A, In Chinese)**.

[8] Liwei Deng, **Tianfu Wang**, Yan Zhao, and Kai Zheng. Million: A general multi-objective framework with controllable risk for portfolio management. In *Proceedings of the VLDB Endowment (**VLDB**)*, 2024. **(CCF-A, CORE A*, Under Review)**.

[9] Liwei Deng, Fei Wang, **Tianfu Wang**, Yan Zhao, Yuyang Xia, and Kai Zheng. Exact and efficient similar subtrajectory search: Integrating constraints and simplification. In *Proceedings of the VLDB Endowment (**VLDB**)*, 2024. **(CCF-A, CORE A*, Under Review)**.

[10] Fei Wang, Qilin Fan, **Tianfu Wang**, Xu Zhang, Xiuhua Li, and Hao Yin. Ikenga: Infeasibility knowledge-enhanced genetic algorithm for virtual network embedding. *IEEE Transactions on Green Communications and Networking (**TGCN**)*, 2023. **(JCR-Q2, Under Review)**.

SERVICES

Reviewer: WWW'24; ACM MM'23, 24;