# TIANFU WANG

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Founded **AuraX.ai** to bridge the gap between frontier AI research and daily human experiences in real world.
Research interests include Agentic AI, Large Language Models, Reinforcement Learning, and Data Mining.
Passionate about practical research that explores innovative applications and production-ready solutions.
Ambitious about establishing an ecosystem of human-AI collaborative applications with real-world impact.
First-authored A-level papers 6 | Total A-level papers 10+ | Total citations 300+ | Github Stars 600+

## EDUCATION

**Hong Kong University of Science and Technology (HKUST-GZ)** Starting 2025

*Ph.D.* in Artificial Intelligence (AI). Supervised by Prof. Hui Xiong (Fellow of AAAI, AAAS, ACM & IEEE).
Co-supervised by the industrial mentor, Dr. Nicholas Jing Yuan (IEEE Fellow & Microsoft Partner)

**University of Science and Technology of China (USTC)** 2022 – 2025

*M.S.* in Computer Science (CS). Supervised by Prof. Hui Xiong (also Associate Vice-President of HKUST-GZ).

**Chongqing University (CQU)** 2018 – 2022

*B.E.* in Software Engineering (SE). Rank: 6/254 (Top 3%). GPA: 3.78/4.00. Member of Elite Student Alliance.

## EXPERIENCE

**Tencent CodeBuddy** - Research Intern under **Qingyun Program** (Mentor: Hande Dong) 2026.01 – NOW

Building self-evolving multi-agent systems for vibing coding and bridging their impacts on human society.

**Microsoft AI** - Research Intern (Mentor: Dr. Nicholas Jing Yuan) 2024.05 – 2025.10

Developed several innovative LLM-based agentic products with applications in education and society.
WWW'25 | Proposed an LLM-powered agentic system that personalizes professional education by goal-orientation.
KDD'26 Reviewing | Designed a personalized social skill learning platform via agentic tutoring and practice.
Developed an agentic reinforcement learning method to enhance the social intelligence of LLMs.
Designed a self-evolving agentic framework applied in the digital employee-as-workforce platform.

**Microsoft & MSRA** - Research Intern (Mentor: Dr. Nicholas Jing Yuan & Dr. Jianxun Lian) 2022.06 – 2023.12

Contributed to both algorithmic and back-end development for Web3 Data Infrastructure and NFT product.
KDD'24 | Proposed a temporal graph-based wallet profiling algorithm for non-fungible tokens (NFTs) valuation.
VLDB'25 | Co-designed a multi-objective framework with controllable risk for portfolio management
MM'23 | Co-developed a profit-aware NFT generation method optimized by reinforcement learning

**JD Explore Academy** - Research Intern (Mentor: Prof. Li Shen) 2021.08 – 2022.04

Researched machine learning methods for combinatorial optimization in cloud computing.
TSC'23 | Proposed a joint resource allocation and scheduling method via hierarchical reinforcement learning.

## AWARDS

***National Scholarship (2024@USTC, 2021@CQU)***; *National Encouragement Scholarship (2019)*;
*Zhu-Jingwen Scholarship (2020)*; *USTC Academic Scholarship×3*; *CQU Excellent Student Scholarship×4*

***Outstanding Graduate, Anhui Province* (2025)**; ***Outstanding Undergraduate Thesis, Chongqing City* (2022)**;
*Smart Dock Future Star, Huawei Inc.*(2021); *Excellent Student, Student Cadres, Volunteer, CQU* (2022,20,19);

***Best Paper Award at ICML'25 Workshop on ML4Wireless (only 1 of 33 accepted papers, 2025)***;
***National First Prize, China Collegiate Computing Contest - Network Technology Challenge (3/1000+, 2021)***;
*M Prize, International Mathematical Contest in Modeling (2021)*; *Other National 2nd & 3rd Prizes × 4*;

## SKILLS

- **Algorithm**: LLM Agent; Reinforcement Learning; Graph Learning; Combinatorial Optimization
- **Development**: Backend (Django, SpringBoot); Frontend (Vue, React); SQL; Smart Contract
- **Others**: Slide Making; Video Editing; Figma Design; Photography; Marathon Running;

## PROJECTS

- **Virne**: An NFV simulator for benchmarking networking resource allocation (Star 100+)
- **GenMentor**: An llm-powered intelligent tutoring system for goal-oriented learning (Star 50+)
- **LLM4EDU Papers**: A paper collection on AI and LLM for education (Star 100+)

## OTHERS

- **Exchange & Visits**: Participated in the AI exchange program of *University of Cambridge*, UK (2021), and the Intelligent Computing visiting program of *University of Tokyo* and *Waseda University*, Japan (2020).
- **Open-source Contributions**: Independently developed the algorithm library on networking resource allocation, *Virne* (Star 100+), and maintains the paper collection project in this field (Star 100+).
- **Community Involvement**: A prospective member of *Datawhale*, a well-known open-source organization, and a core contributor to the *Statistical Learning Method Problem Solving* project (Star 1.9K+).

## SELECTED PUBLICATIONS [GOOGLE SCHOLAR , DBLP]

[1] **Tianfu Wang**, Yi Zhan, Jianxun Lian, Zhengyu Hu, Nicholas Jing Yuan, Qi Zhang, Xing Xie, and Hui Xiong. LLM-powered Multi-agent Framework for Goal-oriented Learning in Intelligent Tutoring System. In *ACM Web Conference (**WWW**)*, 2025. (CCF-A, CORE A*, Oral Presentation) **Fully deployed by the UK AI4Ed startup *grasp.study* and Received a direct job opportunity invitation from its CEO**.

[2] **Tianfu Wang**, Max Xiong, Shang Qin, Jianxun Lian, Hongyuan Zhu, Zhengyu Hu, Yuxuan Lei, Nicholas Jing Yuan, and Qi Zhang. SocialCoach: Personalized Social Skill Training with LLM-based Agentic Tutoring and Practice. In *ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (**KDD**)*, 2026. (CCF-A, CORE A*, Under Review) Deployed in EQoach.

[3] **Tianfu Wang**, Leilei Ding, Ziyang Tao, Yi Zhan, Wei Wu, Yuxuan Lei, Yizhao Xu, Hongyuan Zhu, Qi Liu, Yanyong Zhang, Nicholas Jing Yuan, and Hui Xiong. EvoDiagram: Agentic Editable Diagram Creation via Design Expertise Evolution. In *International Conference on Machine Learning (**ICML**)*, 2026. (CCF-A, CORE A*, Under Review).

[4] **Tianfu Wang**, Xichong Zhang, Yuan Feng, Wei Wu, Zhengyu Hu, Yili Wang, Yijie Xu, Yudong Zhang, and Hui Xiong. Make Benchmark Hard Again: Question Distractor Option Generation via Agentic Reinforcement Learning. In, 2026. (Working).

[5] **Tianfu Wang**, Liwei Deng, Xi Chen, Junyang Wang, Huiguo He, Leilei Ding, Wei Wu, Qilin Fan, and Hui Xiong. Virne: A Comprehensive Benchmark of RL-based Network Resource Allocation in NFV. In *International Conference on Learning Representations (**ICLR**)*, 2026. (CORE A*).

[6] **Tianfu Wang**, Long Yang, Chao Wang, Chuan Qin, Liwei Deng, Wei Wu, Li Shen, and Hui Xiong. CONAL: Towards Constraint-aware Learning for Resource Allocation in NFV-enabled Networks. In *IEEE Transactions on Mobile Computing (**TMC**)*, 2026. (CCF-A, CORE A*, Under Review) **Best Paper Award in ML4Wireless@ICML25 Workshop** (1 of 33 accepted papers).

[7] **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*) Deployed in Microsoft NFT Product, PowerNFT.

[8] Liwei Deng*, **Tianfu Wang***, Yan Zhao, and Kai Zheng. MILLION: A General Multi-Objective Framework with Controllable Risk for Portfolio Management. In *International Conference on Very Large Data Bases (**VLDB**)*, 2025. (CCF-A, CORE A*, Equal Contribution).

[9] **Tianfu Wang**, Qilin Fan, Chao Wang, Leilei Ding, Nicholas Jing Yuan, and Hui Xiong. FlagVNE: A Flexible and Generalizable Reinforcement Learning Framework for Network Resource Allocation. In *International Joint Conference on Artificial Intelligence (**IJCAI**)*, 2024. (CCF-A, CORE A*).

[10] **Tianfu Wang**, Shen Li, Qilin Fan, Tong Xu, Tongliang Liu, and Hui Xiong. Joint Admission Control and Resource Allocation of Virtual Network Embedding via Hierarchical Deep Reinforcement Learning. In *IEEE Transactions on Services Computing (**TSC**)*, 2023. (CCF-A, CORE A*, JCR-Q1).

## SERVICES

- **Reviewer**: ICML'25-26; ICLR'25-26; NeurIPS'24-25; KDD'25-26; WWW'24; AAAI'26; MM'23-24; AISTATS'25-26; IEEE TNSM, TNSE, IoTJ

## RESEARCH

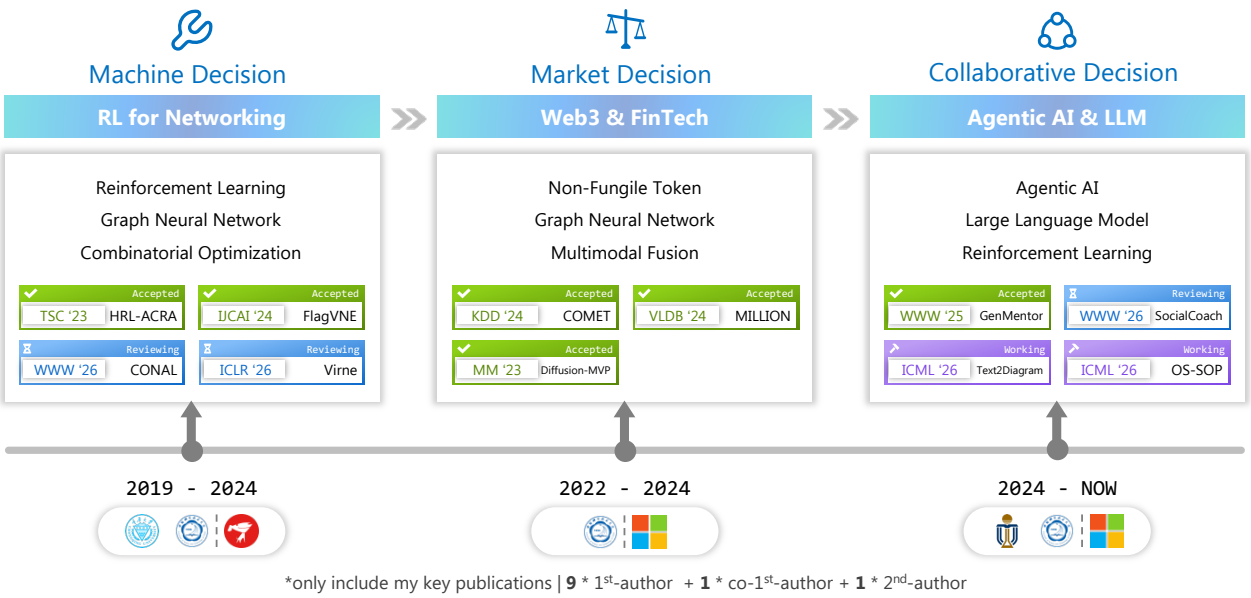


Figure 1: Research Trajectory


Figure 2: Research Vision

### *Ph.D. & M.S.* | Foundation and Applications of Human-centered Agentic AI

@Microsoft · USTC Agentic Tutors for Technical and Social Skills LLM RL Agent

- WWW '25 Oral **GenMentor**, an LLM-powered multi-agent ITS for goal-oriented professional learning. It constructs a reasoning-enhanced goal–skill dataset and fine-tunes LLMs for precise goal understanding and skill-gap detection; performs adaptive learner modeling to support evolvable path optimization; and

adopts an exploration–drafting–integration mechanism for personalized content generation. Deployed in Microsoft and Grasp.study, demonstrating strong improvements in goal alignment and learning efficiency.
- WWW '26 Reviewing **SocialCoach**, an agentic system for personalized social-skill learning. It automatically extracts theory-to-scenario knowledge using multi-agent pipelines; employs RL-based scheduling to adaptively arrange scenario practices that follows a prescription–retrieval–adaptation process; and integrates goal-driven simulations, causality-based proficiency diagnostics, and reflective tutoring to improve engagement and mastery. Deployed in EQoach to provide gamified and scalable coaching.

@Microsoft · USTC Benchmarking & Improving Social Intelligence of LLMs LLM RL Agent

- **SocialGoalAgent**, a framework for evaluating and enhancing LLMs' social intelligence. It models social interactions as a POMDP, with an environment supporting role configuration, goal-driven scenario simulation, and multi-turn dialogue interaction. It systematically analyzes differences among LLMs in social intelligence, revealing the effects of model scale, reasoning biases, and opponent strength. Furthermore, it introduces a multi-turn RL method that integrates emotion-understanding auxiliary tasks and scenario-generation feedback, improving goal achievement and emotion comprehension in complex social settings.

### *B.E. & M.S.* | RL for Combinatorial Optimization on Networking

@USTC · JD RL-based Algorithms for Network Resource Allocation RL GNN

- IJCAI '24 **FlagVNE**, a flexible and generalizable RL framework featuring bidirectional action design, hierarchical action decoding, and meta-RL curriculum training for distinct size-related tasks. It significantly improves searchability and cross-size generalization of learned policies.
- TSC '23 **HRL-ACRA**, a hierarchical RL system for joint admission control and resource allocation. It models the online network as a bilevel optimization, leverages average-reward optimization, multi-objective intrinsic rewards, and GNN-based topology encoding to boost acceptance ratio and long-term revenue.
- WWW '26 Reviewing **CONAL**, a constraint-aware learning framework that integrates violation-tolerant CMDP, reachability-guided optimization, adaptive feasibility budgets, and constraint-aware graph perception. It achieves highly stable and persistent zero-violation policies across diverse network settings.

@CQU · USTC Simulation & Benchmark for Network Resource Allocation RL GNN

- ICLR '26 Reviewing **Virne**, a unified benchmark and simulation suite for RL-based NFV resource allocation. It supports customizable simulations for cloud/edge/5G scenarios, gym-style environments, and 30+ algorithm implementations. Extensive empirical analysis on implementation techniques and performance comparison offers actionable insights for scalable and generalizable RL-based network optimization.

### *M.S* | FinTech and Profit-driven NFT Mining in Web3

@Microsoft · USTC Profit-aware NFT Price Prediction & Generation GNN MM

- KDD '24 **COMET**, a wallet-profiling GNN that builds temporal multi-behavior transaction graphs to model investor behaviors, community influence, and multimodal NFT attributes, enabling unified collection- and token-level price prediction. Deployed in Microsoft PowerNFT for wallet analysis and price prediction.
- MM '23 **Diffusion-MVP**, a profit-aware NFT image generation framework using an NFT-tuned Stable Diffusion, RL-trained LLM prompt rewriter, and visual-policy rewards (rarity, aesthetics, relevance). Built the NFT-1.5M dataset and deployed in PowerNFT, achieving superior quality and market-value alignment.

@Microsoft · USTC Multi-objective Portfolio Optimization with Risk-controllability RL GNN

- VLDB '25 **MILLION**, a multi-objective deep learning framework for risk-controlable portfolio. It develops interpolation- and improvement-based mechanisms that enhance portfolio generalization and enable fine-grained risk control, achieving superior return–risk trade-offs across major markets.

## FULL LIST OF PUBLICATIONS [GOOGLE SCHOLAR , DBLP]

Ph.D. | **Foundation and Applications of Human-centered Agentic AI** (LLM,RL)

[1] **Tianfu Wang**, Yi Zhan, Jianxun Lian, Zhengyu Hu, Nicholas Jing Yuan, Qi Zhang, Xing Xie, and Hui Xiong. LLM-powered Multi-agent Framework for Goal-oriented Learning in Intelligent Tutoring System. In *ACM Web Conference (**WWW**)*, 2025. (CCF-A, CORE A*, Oral Presentation) **Fully deployed by the UK AI4Ed startup *grasp.study* and Received a direct job opportunity invitation from its CEO**.

[2] **Tianfu Wang**, Max Xiong, Shang Qin, Jianxun Lian, Hongyuan Zhu, Zhengyu Hu, Yuxuan Lei, Nicholas Jing Yuan, and Qi Zhang. SocialCoach: Personalized Social Skill Training with LLM-based Agentic Tutoring and Practice. In *ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (**KDD**)*, 2026. (CCF-A, CORE A*, Under Review) Deployed in EQoach.

[3] **Tianfu Wang**, Leilei Ding, Ziyang Tao, Yi Zhan, Wei Wu, Yuxuan Lei, Yizhao Xu, Hongyuan Zhu, Qi Liu, Yanyong Zhang, Nicholas Jing Yuan, and Hui Xiong. EvoDiagram: Agentic Editable Diagram Creation via Design Expertise Evolution. In *International Conference on Machine Learning (**ICML**)*, 2026. (CCF-A, CORE A*, Under Review).

[4] **Tianfu Wang**, Xichong Zhang, Yuan Feng, Wei Wu, Zhengyu Hu, Yili Wang, Yijie Xu, Yudong Zhang, and Hui Xiong. Make Benchmark Hard Again: Question Distractor Option Generation via Agentic Reinforcement Learning. In, 2026. (Working).

[5] Yuxuan Lei, **Tianfu Wang**, Jianxun Lian, Zhengyu Hu, Defu Lian, and Xing Xie. HumanLLM: Towards Personalized Understanding and Simulation of Human Nature. In *ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (**KDD**)*, 2026. (CCF-A, CORE A*).

[6] Zhengyu Hu, Linxin Song, Jieyu Zhang, Zheyuan Xiao, **Tianfu Wang**, Zhenyu Chen, Jianxun Lian, Nicholas Jing Yuan, Kaize Ding, and Hui Xiong. Unveiling the Learning Mind of Language Models: A Cognitive Framework and Empirical Study. In *Annual Conference on Neural Information Processing Systems (**NeurIPS**)*, 2025. (CCF-A, CORE A*).

[7] Wei Wu, Zhuoshi Pan, Chao Wang, Liyi Chen, Yunchu Bai, **Tianfu Wang**, Kun Fu, Zheng Wang, and Hui Xiong. TokenSelect: Efficient Long-Context Inference and Length Extrapolation for LLMs via Dynamic Token-Level KV Cache Selection. In *Conference on Empirical Methods in Natural Language Processing (**EMNLP**)*, 2025. (CCF-B, CORE A*).

[8] Zhengyu Hu, Linxin Song, Jieyu Zhang, Zheyuan Xiao, **Tianfu Wang**, Zhenyu Chen, Jianxun Lian, Nicholas Jing Yuan, Kaize Ding, and Hui Xiong. Explaining Length Bias in LLM-Based Preference Evaluations. In *Conference on Empirical Methods in Natural Language Processing (**EMNLP**)*, 2025. (CCF-B, CORE A*).

[9] Yi Zhan, Qi Liu, Weibo Gao, Zheng Zhang, **Tianfu Wang**, Zhenya Huang, Junyu Lu, and Shuanghong Shen. CoderAgent: Simulating Student Behavior for Personalized Programming Education with Large Language Models. In *International Joint Conference on Artificial Intelligence (**IJCAI**)*, 2025. (CCF-A, CORE A*).

[10] Zhengyu Hu, Zheyuan Xiao, Max Xiong, Yuxuan Lei, **Tianfu Wang**, Jianxun Lian, Kaize Ding, Ziang Xiao, Nicholas Jing Yuan, and Xing Xie. Population-Aligned Persona Generation for LLM-based Social Simulation. In *Annual Meeting of the Association for Computational Linguistics (**ACL**)*, 2026. (CCF-A, CORE A*, Under Review).

[11] Junyang Wang, Lan Zhang, Zhaomeng Zhou, Mu Yuan, **Tianfu Wang**, and Puhan Luo. AgentRouter: Think Whole or Think Apart? Memory-Augmented Adaptive Routing for Cost-Effective On-Device Agent Inference. In *Annual Meeting of the Association for Computational Linguistics (**ACL**)*, 2026. (CCF-A, CORE A*, Under Review).

[12] Wei Wu, Liyi Chen, Congxi Xiao, **Tianfu Wang**, Qimeng Wang, Chengqiang Lu, Yan Gao, YIWU, Yao Hu, and Hui Xiong. Anti-Length Shift: Dynamic Outlier Truncation for Training Efficient Reasoning Models. In *Annual Meeting of the Association for Computational Linguistics (**ACL**)*, 2026. (CCF-A, CORE A*, Under Review).

[13] Leilei Ding, Shaoxuan Wang, Dazhong Shen, Ziyang Tao, **Tianfu Wang**, Wuyang Zhang, and Yanyong Zhang. PreemptGuard: General Inference Scheduling for Efficient LLM Inference with Short-Tail Length Prediction. In *ACM Web Conference (**WWW**)*, 2026. (CCF-A, CORE A*, Under Review).

[14] Yin Wu, **Tianfu Wang**, Zechao Chen, Zhengxuan Zhang, Yuyu Luo, Hui Xiong, and Nan Tang. Why Train When You Can Evolve?: Multi-Objective LLM Adaptation Without Gradients. In *International Conference on Machine Learning (**ICML**)*, 2026. (CCF-A, CORE A*, Under Review).

[15] Yuxuan Lei, Jianxun Lian, Defu Lian, Jincenzi Wu, **Tianfu Wang**, and Xing Xie. A Computational Framework for Evaluating Human-likeness in LLMs' Situated Behaviors. In *International Conference on Machine Learning (**ICML**)*, 2026. (CCF-A, CORE A*, Under Review).

[16] Zhangyi Hu, Chenhui Liu, Tian Huang, **Tianfu Wang**, and Yutao Yue. CoSPlay: Cooperative Training-Free Self-Play with Purely Self-Generated Idea-Level Unit Test Attack and Iterative Code Refinement. In *International Conference on Machine Learning (**ICML**)*, 2026. (CCF-A, CORE A*, Under Review).

[17] Huizai Yao, Yijie Xu, **Tianfu Wang**, Yili Wang, Yi Cui, Yunfan Lu, Fengjie Zhu, Xuemin Zhao, Hengyao Bao, Ying Sun, and Hui Xiong. Gated Test-Time Scaling for GUI Grounding via Multi-Seed Zoom Search. In *International Conference on Machine Learning (**ICML**)*, 2026. (CCF-A, CORE A*, Under Review).

B.E. & M.S. | **RL for Combinatorial Optimization on Networking** (RL,GNN)

[1] **Tianfu Wang**, Qilin Fan, Chao Wang, Leilei Ding, Nicholas Jing Yuan, and Hui Xiong. FlagVNE: A Flexible and Generalizable Reinforcement Learning Framework for Network Resource Allocation. In *International Joint Conference on Artificial Intelligence (**IJCAI**)*, 2024. (CCF-A, CORE A*).

[2] **Tianfu Wang**, Shen Li, Qilin Fan, Tong Xu, Tongliang Liu, and Hui Xiong. Joint Admission Control and Resource Allocation of Virtual Network Embedding via Hierarchical Deep Reinforcement Learning. In *IEEE Transactions on Services Computing (**TSC**)*, 2023. (CCF-A, CORE A*, JCR-Q1).

[3] **Tianfu Wang**, Liwei Deng, Xi Chen, Junyang Wang, Huiguo He, Leilei Ding, Wei Wu, Qilin Fan, and Hui Xiong. Virne: A Comprehensive Benchmark of RL-based Network Resource Allocation in NFV. In *International Conference on Learning Representations (**ICLR**)*, 2026. (CORE A*).

[4] **Tianfu Wang**, Long Yang, Chao Wang, Chuan Qin, Liwei Deng, Wei Wu, Li Shen, and Hui Xiong. CONAL: Towards Constraint-aware Learning for Resource Allocation in NFV-enabled Networks. In *IEEE Transactions on Mobile Computing (**TMC**)*, 2026. (CCF-A, CORE A*, Under Review) **Best Paper Award in ML4Wireless@ICML25 Workshop** (1 of 33 accepted papers).

[5] **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).

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

[7] Wen Gao, Zhiwen Yu, **Tianfu Wang**, Liang Wang, Helei Cui, Bin Guo, and Hui Xiong. GNN-based Deep Reinforcement Learning for Computation Task Scheduling in Autonomous Multi-Robot Systems. In *Journal of Systems Architecture: Embedded Software Design (**JSA**)*, 2025. (CCF-B, CORE B, JCR-Q1).

[8] Fei Wang, Qilin Fan, **Tianfu Wang**, Xu Zhang, Xiuhua Li, and Hao Yin. IKENGA: Infeasibility Knowledge Enhanced Genetic Algorithm for Virtual Network Embedding. In *IEEE Transactions on Green Communications and Networking (**TGCN**)*, 2025. (JCR-Q2).

M.S. | **FinTech and Profit-driven NFT Mining in Web3** (RL,GNN)

[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*) Deployed in Microsoft NFT Product, PowerNFT.

[2] Liwei Deng*, **Tianfu Wang***, Yan Zhao, and Kai Zheng. MILLION: A General Multi-Objective Framework with Controllable Risk for Portfolio Management. In *International Conference on Very Large Data Bases (**VLDB**)*, 2025. (CCF-A, CORE A*, Equal Contribution).

[3] 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*) Deployed in Microsoft NFT Product, PowerNFT.

**Other Topics (*e.g.*, RecSys, VectorDB, 3D Gen, FedLearning)**

[1] Liwei Deng, Penghao Chen, Ximu Zeng, **Tianfu Wang**, Hao Miao, Yan Zhao, and Kai Zheng. Efficient Data-aware Distance Comparison Operations for High-Dimensional Approximate Nearest Neighbor Search. In *International Conference on Very Large Data Bases (**VLDB**)*, 2025. (CCF-A, CORE A*).

[2] Liwei Deng, Fei Wang, **Tianfu Wang**, Yan Zhao, Yuyang Xia, and Kai Zheng. Exact and Efficient Similar Subtrajectory Search: Integrating Constraints and Simplification. In *IEEE International Conference on Data Engineering (**ICDE**)*, 2025. (CCF-A, CORE A*).

[3] 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*).

[4] Yizhao Xu, Hongyuan Zhu, Caiyun Liu, **Tianfu Wang**, Keyu Chen, Sicheng Xu, Jiaolong Yang, Nicholas Jing Yuan, and Qi Zhang. Beyond Voxel 3D Editing: Learning from 3D Masks and Self-Constructed Data. In *IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**)*, 2026. (CCF-A, CORE A*, Under Review).

[5] Junyang Wang, Lan Zhang, Yihang Cheng, Mu Yuan, **Tianfu Wang**, Zhihui Fu, and Jun Wang. TopFGL: A Topology-Aware and Distribution-Agnostic Federated Learning Framework Tackling Topological Heterogeneity on Graph Data. In *IEEE International Conference on Data Engineering (**ICDE**)*, 2026. (CCF-A, CORE A*).

[6] Xinrui Li, Qilin Fan, **Tianfu Wang**, Kaiwen Wei, Ke Yu, and Xu Zhang. GraphFedMIG: Tackling Class Imbalance in Federated Graph Learning via Mutual Information-Guided Generation. In *AAAI Conference on Artificial Intelligence (**AAAI**)*, 2025. (CCF-A, CORE A*, Under Review).

[7] Ke Fang, Qilin Fan, **Tianfu Wang**, Deng Liwei, Chen Chao, and Li Xiuhua. Beyond Correlation: A Causal Graph Approach to Fair and Stable Federated Traffic Forecasting. In *ACM Web Conference (**WWW**)*, 2026. (CCF-A, CORE A*, Under Review).

[8] Qilin Xiang, Qilin Fan, Xinrui Li, **Tianfu Wang**, Shuting Qiu, and Yue Niu. AlignFL: Adaptive Learning and Intelligent Generation of Networks for Federated Learning. In *IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**)*, 2026. (CCF-A, CORE A*, Under Review).

[9] Yunpeng Lei, Qilin Fan, **Tianfu Wang**, Qilin Xiang, and Ronghao Zheng. DynSFL: Harmonizing Stability and Diversity in Split Federated Learning via Dual-Stream Experts. In *ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (**KDD**)*, 2026. (CCF-A, CORE A*) (Under Review).

[10] Liwei Deng, Yan Zhao, **Tianfu Wang**, Han Yang, Christian S. Jensen, and Kai Zheng. Context-Normalized Fair Task Assignment in Spatial Crowdsourcing. In *ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (**KDD**)*, 2026. (CCF-A, CORE A*, Under Review).