Yifei Zhang

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Education

B.Sc. in Computer Science and Technology (FinTech) — **Nanjing University**
*Department of Computer Science and Technology, **Top Talent Class*** — *Sep 2020 – Jun 2024*
M.Sc. in Management Science and Engineering — **Nanjing University**
School of Management & Engineering, supervised by Prof. Honghai Yu — *Sep 2024 – Jun 2027*

Intern Experience

School of Data Science, CUHK-Shenzhen — *Jun 2024 – Mar 2025*
Research intern advised by Prof. Benyou Wang
ML Group, Microsoft Research Asia (MSRA) — *May 2025 – Jan 2026*
Research intern advised by Weiqing Liu and Xiao Yang

Research & Projects

UCFE Benchmark — *Aug 2024 – Jan 2025*
Advised by Prof. Benyou Wang, Prof. Honghai Yu, and Jimin Huang — *Project Leader*

* Designed **UCFE Benchmark**, a user-centric financial expertise evaluation framework addressing limitations of existing benchmarks in dynamic interaction and multi-turn dialogue.
* Led survey of **804 participants** and constructed dataset with 330 entries across 17 task types; achieved strong human alignment (Pearson 0.78) using **GPT-4o** simulator and **LLM-AS-JUDGE**.

TwinMarket — *Oct 2024 – Mar 2025*
Advised by Prof. Benyou Wang, Prof. Honghai Yu — *Project Leader*

* Led development of **TwinMarket**, a BDI-based multi-agent framework using LLMs to simulate investor behavior and social interactions in A-stock financial markets.
* Scaled to **1,000+ agents**, successfully replicating key financial phenomena (fat-tailed returns, volatility clustering) and emergent social dynamics (information cascades, opinion leaders).

RD-Agent(10,000 + GitHub stars) — *May 2025 – Jan 2026*
Advised by Weiqing Liu and Xiao Yang — *Core Contributor*

* **MLE**: Reframed automated ML engineering from tree search to gradient-based optimization, achieving **35.1% medal rate** (SOTA) under closed-world protocol.
* **MLE**: Designed scaling experiments demonstrating that gradient-based methods increasingly outperform tree search as model reasoning capability improves. *(Submitted to ACL 2026)*
* **Finetune**: Formulated autonomous LLM fine-tuning as joint optimization over data processing and training configuration, extending AutoML to the LLM era. *(To be submitted to ICML 2026)*

AI-Trader (10,000+ GitHub Stars) — *Nov 2025 – Jan 2026*
Collaboration with HKUDS Lab, HKU — *Project Leader*

* Led development of **A-share market module**, extending the LLM-based trading agent framework to support Chinese equity markets with T+1 settlement, ±10% price limits, and market-specific trading rules. *(To be submitted to ICML 2026)*

Publications

UCFE: A User-Centric Financial Expertise Benchmark for Large Language Models
NAACL Findings 2025

TwinMarket: A Scalable Behavioral and Social Simulation for Financial Markets
***NeurIPS 2025** & **Best Paper Award** in Financial AI @ ICLR 2025*

Honors & Awards

People's Scholarship of Nanjing University	*Oct 2021 & Nov 2022*
Elite Scholarship, **Top Talent Class** of Nanjing University (**top 30%**)	*Nov 2021*
Excellence Scholarship, **Top Talent Class** of Nanjing University (**top 15%**)	*Dec 2023*
Second Prize, Third "Xueshi Cup" Academic Paper Competition (**top 15%**)	*May 2024*
China **National Scholarship** for Master's Students, Nanjing University **(top 0.2%)**	*Oct 2025*