# Yuzhe (Toby) Yang

yuzheyang@link.cuhk.edu.cn

TobyYang7
Google Scholar
yuzheyang.com

## Short Bio

Yuzhe (Toby) Yang is a final-year undergraduate student at The Chinese University of Hong Kong, Shenzhen. His research focuses on building reliable and trustworthy AI systems that bridge the gap between machines and the real world. His interests include (vision) language models, interactive agents, and model interpretability. He aims to improve the robustness, alignment, and transparency of AI systems through grounded reasoning, world modeling, and the analysis of internal mechanisms in large language models.

## Education

**The Chinese University of Hong Kong, Shenzhen** — Sep. 2021 – May 2025
B.Eng. in Computer Science & Engineering — Shenzhen, China

## Experiences

**UCSB ERIC Lab** — Jul. 2025 – Present
Visiting Student (Advisor: Xin Eric Wang) — Santa Barbara, CA, USA
Topic: Agent, Trustworthy NLP

**CUHK-Shenzhen NLP Group** — Jun. 2024 – Present
Undergraduate Research Assistant (Advisors: Benyou Wang, Yan Hu) — Shenzhen, China
Topic: Multi-Agent System [C1], Human-AI Interaction [C2], Trustworthy NLP [C4]

**School of Management & Engineering, Nanjing University** — Aug. 2024 – Jan. 2025
Undergraduate Research Assistant (Advisor: Honghai Yu) — Nanjing, China
Topic: AI-driven Social and Economic Simulation [C1]

**TheFinAI** — Jun. 2024 – Oct. 2024
Researcher (Advisors: Jimin Huang, Qianqian Xie) — Remote
Topic: Financial (Vision) Language Model [P1]

**School of Data Science, CUHK-Shenzhen** — Aug. 2023 – Jun. 2024
Undergraduate Research Assistant (Advisor: Jianfeng Mao) — Shenzhen, China
Topic: Spatial-Temporal Data Mining [J1, P3]

## Publications

(† indicates equal contribution)

### Conference & Workshop Papers

C1. **Yuzhe Yang**†, Zhang†, Y., Wu†, M., Zhang, K., Zhang, Y., *et al. TwinMarket: A Scalable Behavioral and Social Simulation for Financial Markets* 2025. https://arxiv.org/abs/2502.01506.
**Best Paper Award, Travel Grant Award** (ICLR 2025 Workshop on Advances in Financial AI).

C2. **Yuzhe Yang**†, Zhang†, Y., Hu†, Y., Guo, Y., Gan, R., *et al. UCFE: A User-Centric Financial Expertise Benchmark for Large Language Models* in *Findings of the Association for Computational Linguistics: NAACL 2025* (Albuquerque, New Mexico, Apr. 2025). https://aclanthology.org/2025.findings-naacl.300/.

C3. Wu, J., Chen, S., Tang, J., **Yuzhe Yang**, Chen, Y., *et al. FDPT: Federated Discrete Prompt Tuning for Black-Box Visual-Language Models* in *Proceedings of the IEEE/CVF International Conference on Computer Vision (ICCV)* (Hawaii, USA, Oct. 2025).

C4. Li, Z., Wang, X., **Yuzhe Yang**, Yao, Z., Xiong, H. & Du, M. *Feature Extraction and Steering for Enhanced Chain-of-Thought Reasoning in Language Models* in *Proceedings of the 2025 Conference on Empirical Methods in Natural Language Processing* (Suzhou, China, Nov. 2025). https://arxiv.org/abs/2505.15634.

### Journal Papers

J1. Li, C., Qi, X., **Yuzhe Yang**, Zeng, Z., Zhang, L. & Mao, J. FAST-CA: Fusion-based Adaptive Spatial–Temporal Learning with Coupled Attention for airport network delay propagation prediction. *Information Fusion* **107,** 102326. https://www.sciencedirect.com/science/article/pii/S1566253524001040 (2024).

### Preprints & Technical Reports

P1. Huang, J., Xiao, M., Li, D., Jiang, Z., **Yuzhe Yang**, *et al. Open-FinLLMs: Open Multimodal Large Language Models for Financial Applications* 2025. https://arxiv.org/abs/2408.11878.

P2. Wu, J., Chen, S., **Yuzhe Yang**, Li, Y., Hou, S., *et al. FedDTPT: Federated Discrete and Transferable Prompt Tuning for Black-Box Large Language Models* 2024. https://arxiv.org/abs/2411.00985.

P3. Li, C., Lei, M., Wu, J., **Yuzhe Yang**, Pan, Z., *et al. Integrative Mean-Field Epidemic Model and Adaptive Graph Learning for Network-wide Delay Propagation Dynamics Prediction* 2024.

## Awards

**Best Paper Award** (ICLR 2025 Workshop on Advances in Financial AI) 2025
**Travel Grant Award** (ICLR 2025 Workshop on Advances in Financial AI) 2025
**Kaggle Silver Medal** (AI Mathematical Olympiad - Progress Prize 2) 2025
**Undergraduate Research Award** (CUHK-Shenzhen) 2024, 2025
**Outstanding College Contribution Award** (CUHK-Shenzhen) 2021, 2022

## Presentations

**TwinMarket: A Scalable Behavioral and Social Simulation for Financial Markets**
• Guest lecture for CSC6052, Spring 2025, CUHK-Shenzhen Apr. 2025
• Contributed talk at the ICLR 2025 Workshop, Singapore Apr. 2025
• Invited talk at the Wisemodel Open-source Series (Virtual) May 2025

## Projects

**Quant-GPT: Money is All You Need** | PyTorch, Transformers, ChromaDB May 2024
*Multi-Agent system for A-share market investment decisions.*
• Fine-tuned LLM with sentiment analysis and real-world market data integration
• Implemented RAG and multi-agent systems for dynamic financial news synthesis
• Achieved Sharpe Ratio: 0.40, Annualized Return: 7.26%, Max Drawdown: 13.61%

## Skills

**Programming Languages:** Python, C/C++, HTML/CSS
**Developer Tools:** Pytorch, Transformers, LangChain, Faiss, Git, Slurm