Haohang Li

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Hoboken, New Jersey, 07030

Research Interests

Language Model Agent Design, Interpretability & Evaluation,, Language Models, AI Safety

Education

Stevens Institute of Technology — Hoboken, NJ
Ph.D. in Data Science | GPA: 3.9/4.0 — 08/2022 - Present

- Explainable & Controllable AI Lab (Advisor: Zining Zhu), Cognition Lab (Advisor: Jordan W. Suchow)

Stevens Institute of Technology — Hoboken, NJ
M.S. in Financial Engineering (Merit, Ranked #1 in program) | GPA: 4.0/4.0 — 09/2019 - 12/2021

Fellowships & Awards

Fellowships

- Provost Doctoral Fellowship — 2022 - 2026
- Data Science PhD Fellowships Funded by Jefferies Financial Group — 2022 - 2023
- Stevens Doctoral Travel Grant (NeurIPS 2024) — 2024
- Graduate Merit Scholarship — 2019

Awards

- Great Review recognition, ARR October — 2025
- Top Reviewer Award, KDD — 2024
- Outstanding Academic Achievement Award (Merit) — 2021

Work Experience

Kensho Technologies (S&P Global AI Hub) — New York City, NY
Research Scientist Intern — 05/2025 - 08/2025

- Designed a domain-specific safety benchmark for production LLM deployment in financial services, collaborating with legal and compliance teams to map regulatory requirements to testable risk categories.
- Built end-to-end evaluation pipeline—from LLM-assisted test generation (500+ cases) to automated inference and structured violation extraction—for credit bias and financial advice safety assessment.
- Developed interactive Streamlit visualization dashboard to surface violation cases and compiled weekly findings for stakeholder review.

Jefferies Financial Group — New York City, NY
Data Scientist Research Intern — 04/2022 - 06/2023

- Engineered a client-product recommendation model using deep tensor factorization, optimizing weighted loss functions to handle highly imbalanced engagement data and match production system performance.
- Adapted gradient-based interpretability methods (Integrated Gradients) to decompose predictions into feature contributions, enabling sales teams to conduct informed client conversations—solving a cold-start problem the existing system couldn't address.

EAS Innovation Consulting, Inc. — Higganum, CT
Data Analyst — 09/2021 - 04/2022

- Developed full-stack backtesting platform with Python backend and Streamlit frontend, enabling systematic strategy evaluation and parameter optimization for quantitative trading.

Published Works

(☆: First Author / Co-first Author)

Topics: Language Model Agent Design · Evaluation · Model Training · Interpretability · AI Safety · Application

Refereed Publications

- Shashidhar Reddy Javaji, Yupeng Cao, **Haohang Li**, et al. Can AI Validate Science? Benchmarking LLMs for Accurate Scientific Claim Evidence Reasoning. ***AACL-IJCNN***. 2025. **(Oral Presentation)** (Link)
- Yupeng Cao, **Haohang Li**, Yangyang Yu, et al. FinAudio: A Benchmark for Audio Large Language Models in Financial Applications. ***GenAI in Finance @NeurIPS***. 2025. (Link)
- ☆**Haohang Li**, Yupeng Cao, Yangyang Yu, et al. Truth Neurons. In ***Knowledgeable Foundational Models @ ACL***. 2025. (Link)
- ☆Yangyang Yu*, **Haohang Li***, Zhi Chen*, et al. FinMem: A Performance-Enhanced LLM Trading Agent with Layered Memory and Character Design. ***IEEE Transactions on Big Data, LLM Agent @ ICLR***. 2025. (Link)
- ☆**Haohang Li***, Yupeng Cao*, Yangyang Yu*, et al. 2025. INVESTORBENCH: A Benchmark for Financial Decision-Making Tasks with LLM-based Agent. ***ACL (Main)***. 2025. (Link)
- Guojun Xiong, Zhiyang Deng, Keyi Wang, ..., **Haohang Li**, et al. 2025. FLAG-TRADER: Fusion LLM-Agent with Gradient-based Reinforcement Learning for Financial Trading. ***ACL (Findings)***. 2025. (Link)
- Yupeng Cao, Zhi Chen, Prashant Kumar, ..., **Haohang Li**, et al. Risklabs: Predicting Financial Risk Using Large Language Model Based on Multi-Source Data. **MMFMS@ICAIF**. 2024. (Link)
- ☆Yangyang Yu*, Zhiyuan Yao*, **Haohang Li***, et al. FinCon: A Synthesized LLM Multi-Agent System with Conceptual Verbal Reinforcement for Enhanced Financial Decision Making. ***NeurIPS***. 2024. (Link)
- Qianqian Xie, Weiguang Han, Zhengyu Chen, ..., **Haohang Li**, et al. FinBen: A Holistic Financial Benchmark for Large Language Models. ***NeurIPS***. 2024. (Link)

Refereed Preprints

- Xueqing Peng, Lingfei Qian, Yan Wang, ..., **Haohang Li**, et al. MultiFinBen: A Multilingual, Multimodal, and Difficulty-Aware Benchmark for Financial LLM Evaluation. Under Review *ARR October*. 2025. (Link)
- Jimin Huang, Mengxi Xiao, Dong Li, ..., **Haohang Li**, et al. Open-finllms: Open Multimodal Large Language Models for Financial Applications. Under Review *Journal of Information Processing & Management*. 2024. (Link)

Refereed Workshop and Shared Task Reports

- Yangyang Yu, **Haohang Li**, Yupeng Cao, et al.FinNLP-FNP-LLMFinLegal@COLING 2025 Shared Task: Agent-Based Single Cryptocurrency Trading Challenge. 2025. (Link)
- Qianqian Xie, Jimin Huang, Dong Li, ..., **Haohang Li**, et al. FinNLP-AgentScen-2024 Shared Task: Financial Challenges in Large Language Models-FinLLMs. 2024. (Link)

Teaching

BIA 667 Introduction to Deep Learning and Business Applications

Teaching Assistant 01/2023 - 12/2023

- Assisted the instructor with grading homework and preparing quizzes, and provided support to students during office hours by answering related questions.

Professional Service

Workshop Challenge/Contest

- **Organizer**, Agent-based Single Cryptocurrency Trading in FinNLP-FNP-LLMFinLegal @ COLING (Link) 2025
- **Organizer**, Financial Challenges at Workshop of FinNLP-AgentScen @ IJCAI (Link) 2024

Program Committee Member: AAAI-26, FinNLP-FNP-LLMFinLegal @ COLING-2025

Reviewer: NeurIPS-25, ICLR-25 26, ICML-25, KDD-24 25, ARR-24 25, WWW 25, COLM-24 25

Selected Talks

- **Haohang Li** (2024). **LLM Agent Architecture Design for Financial Decision Making**, *IEEE Symposium on Computational Intelligence for Financial Engineering and Economics (CIFEr)*, Hoboken.

References

- **Jordan W. Suchow, (Ph.D. Advisor)**
  Assistant Professor, Information Systems
  Stevens Institute of Technology
  Email: jws@stevens.edu
- **Zing Zhu, (Ph.D. Advisor)**
  Assistant Professor, Computer Science
  Stevens Institute of Technology
  Email: zzhu41@stevens.edu

Skills

- **Programming:** Python, Rust, Julia, R, C++, C, SQL.
- **ML:** PyTorch, JAX, TensorFlow, Hugging Face Transformers, Scikit-learn, vLLM, PEFT, TRL, LangChain, OpenAI Agent SDK, Fast MCP.
- **Data & Infrastructure:** PostgreSQL, MySQL, MongoDB, PySpark, Docker, AWS, GCP, FAISS, Pinecone, Weights & Biases.
- **Web Frameworks:** FastAPI, Flask, Streamlit.

Last updated: 11/2025