HAOXUAN (JEFF) LI

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EDUCATION

Massachusetts Institute of Technology — **Cambridge, MA**
Master of Finance, Financial Engineering Concentration — Jul. 2023 – Feb. 2025

- **Coursework** (GPA: 4.9/5.0): Advanced Mathematical Methods for Financial Engineering, Matrix Methods, Advanced Analytics of Finance, Financial Engineering, Advanced Data Analytics and Machine Learning, Large-Scale Decision-Making and Inference

University of Virginia — **Charlottesville, VA**
B.A. with Distinction in Mathematics and Computer Science with minor in Economics — Aug. 2017 – Dec. 2020

- **Exchange at Tsinghua University** (Spring 2020, GPA: 4.0/4.0): Computational Finance, Database, Computer Networks
- **Coursework** (GPA: 3.9/4.0): Stochastic Processes, Partial Differential Equations, Time Series Analysis, Mathematics of Derivative Securities, Machine Learning, Artificial Intelligence, NLP, Algorithms, Data Structures, Computer Architecture, Econometrics

EXPERIENCE

Acadian Asset Management — **Boston, MA**
Long-Short Strategies Quantitative Research Intern, Alternatives Strategies Team — May 2024 – Aug. 2024

- Preprocessed stock-level borrow costs data by handling outliers, missing values, back-filled entries, and incompatible datatypes; identified and resolved database maintenance issues for team, ensuring high-quality inputs for modeling and analysis
- Performed time-series and cross-sectional exploratory data analysis on broker borrow costs; revealed insights on data distributions across regions and brokers to formulate model specifications and statistical hypotheses on medium-term borrow cost drivers
- Developed and validated prediction model via exponentially weighted moving average and Fama-MacBeth regressions; captured borrow cost patterns across markets by refining model with varying lookback windows and half-lives
- Factored in brokers' general collateral rates by region to improve borrow cost predictions; devised innovative approach to address tail values by partitioning data into cost buckets; protected portfolios from transactions driven by teaser rates and short-term noise

Fidelity Investments – MIT Finance Lab — **Boston, MA**
Quantitative Researcher, Fidelity Institutional Wealth Adviser (FIWA) — Jan. 2024 – Mar. 2024

- Developed dynamic portfolio strategies centered on tactical asset allocation to outperform traditional 60/40 equity/bond strategy, integrated macroeconomic and momentum factors to strengthen portfolio resilience across varying market conditions
- Employed rolling multiple regressions and Fama-MacBeth tests to conduct rigorous robustness checks, validate model consistency, highlight factor significance, and select key variables for enhanced predictive accuracy and temporal stability
- Achieved higher Sharpe ratios and lower maximum drawdowns in both in-sample and out-of-sample backtests; engineered and implemented a factor-based dynamic weight adjustment algorithm to beat benchmark non-dynamic strategy

Ubiquant Investment — **Beijing, China**
Top Hedge Fund in China with $10B AUM
Alternative Data Quantitative Research Intern — Nov. 2021 – May 2022

- Pioneered and maintained an internal platform that collected real-time perspectives from financial analysts and equity researchers to capture alpha opportunities; optimized workstream through monthly communications with 13 top APAC financial institutions
- Conducted alpha research and constructed strategies based on equity research report data via machine learning algorithms (XGBoost) and IC-IR analysis; backtests yielded a 2.03 Sharpe ratio and an annualized excess return of 18%
- Established a research database from scratch in ClickHouse using SQL and Python; processed and managed 5 million stock-level alternative data entries; database adopted by team as foundation for quantitative research on equity alphas

CICC (China International Capital Corporation) — **Beijing, China**
Derivative Trading Summer Analyst, Equities Department — Jul. 2020 – Aug. 2020

- Constructed hedging model using Neural Networks and Random Forest algorithms, achieving 5% excess return against CSI 500 Index in backtests; updated model through monthly retraining with Bloomberg data
- Analyzed foreign exchange exposure of Quanto derivative products via backtesting and assessed FX impacts on product payoffs
- Collaborated with structurers and sales in designing and pitching new derivative products to fulfill diverse client interests

RESEARCH EXPERIENCE

MIT Computer Science & Artificial Intelligence Lab (MIT CSAIL) — **Cambridge, MA**
Research Topic: Multimodal Sensor-Video Integration for Enhanced Text Generation — Oct. 2023 – Dec. 2023

- Replicated and adapted Microsoft's UniVL model for multimodal understanding and generation to current developer environments, ensuring seamless model functionality and performance enhancement under Linux virtual environment and GPU acceleration
- Applied adapted UniVL model on ActionSense dataset to generate textual outputs from complex sensor data of dynamic human actions, including motion tracking, external forces measurements, and attention-based analysis
- Addressed data scarcity by leveraging video data for sensor model training, incorporating methodologies from the Video-LLaMA project, with a focus on enhancing text generation capabilities using IMU sensors and unpaired video data

ADDITIONAL INFORMATION

Technical Skills and Certificates: Python, Java, C++, C, MATLAB, R, MySQL, Stata, LaTex, Bloomberg; CFA Level I, FRM Part I
Languages: Chinese (fluent), French (beginner), Japanese (beginner), Korean (beginner)
Interests: Theater (Director of UVA Drama Club), Archery, Tennis, Badminton, Rubik's Cube (personal best: 28.54 seconds), Sudoku