YUJIA HUANG

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Southwestern University of Finance and Economics
Department of RIEM

Areas of study: Quantitative trading and alpha research, Blockchain infrastructure (Layer 2, ZK), Machine learning and mathematical modeling

EXPERIENCE

- **BigQuant | Quantitative Research Intern** Jul 2025 – Sep 2025
  Link: https://bigquant.com/
  - Developed daily-frequency stock selection strategies using machine learning models (LightGBM, XGBoost, CatBoost) with avg. Sharpe > 2.0; contributed to BigQuant SDK development and deployed live trading strategies integrating with QMT for automated execution.
  - Built high-frequency ETF timing and daily-frequency fund selection strategies covering index, sector, and Smart Beta.
  - Designed high-frequency futures strategies: cleaned, time-synchronized, and cross-validated 700K+ minute-level and tick data via DAI-SQL; replicated/developed 10+ strategies on Huatai Futures.
  - Developed daily-frequency deep learning cryptocurrency strategies using BigQuant visual modules and Binance data (DNN/CNN); summarized OKX order API for live deployment and iterative evaluation.
- **China Blockchain Research Center | Research Intern** Jan 2024 – Apr 2024
  Link: https://x.swufe.edu.cn/jgsz/kyjg/zgqklyjzx.htm
  - Conducted investment research on modular Layer 2 projects like Manta; created a six-dimensional evaluation framework (Executive Summary, Market Overview, Project Introduction, Investment Highlights, Valuation, Risk Factors) and formed a ”cautiously optimistic” outlook.
  - Analyzed on-chain data and market indicators (e.g., L2 dominance 77.2%, Celestia market cap +450%); proposed strategic asset allocation, tracked market fluctuations and ZK ecosystem developments to identify technical risks and entry opportunities, achieving simulated returns over 300%.

EDUCATION

- **Southwestern University of Finance and Economics** Sep 2023 – 2027
  - Bachelor of Finance; Minor in Business Administration
  - Currently enrolled in the Honors Program in Mathematics

PROJECTS

- **Quantitative Backtesting Platform | Full-stack Developer** Mar 2025 – Apr 2025
  - Built a cloud-native quantitative platform on Sealos to support strategy design, backtesting, simulated trading, and data orchestration. Utilized Cursor and AI-assisted tools to streamline full-stack development and deployment.
  - **Responsibilities:**
    - Built frontend with Vue 3 + TypeScript; developed key modules and integrated charting and dark/light themes.
    - Developed Node.js backend with WebSocket support; enabled sandboxed strategy execution and realistic backtesting API.
    - Optimized performance with virtual scrolling, lazy loading, and PostgreSQL sharding + caching.
    - Implemented strategy versioning, task scheduling, and CI/CD with monitoring for stable operations.
  - **Achievements:**
    - Supported 30+ indicators and 6 strategy types; 500+ daily backtests with <50ms latency.
    - Boosted frontend FCP to 0.7s and backend QPS to 1500+; Lighthouse score 92.
    - Maintained 99.95% uptime; AI-assisted coding enhanced development efficiency.

SKILLS

- **Programming:** Python (NumPy, Pandas, LightGBM, XGBoost, CatBoost, Matplotlib, Seaborn, Plotly), Java, VBA, SQL (MySQL)
- **Other:** Data analysis, backtesting, WebSocket APIs
- **Languages:** Chinese (Native); English (skillful)

AWARDS

- **WorldQuant Brain Infinity Champions 002 — Alphathon 2023 | Global 3rd** Aug 2023 – Sep 2023
  Link: https://drive.google.com/file/d/1VVNLmBPgznOQh9H6XZxMrFm-jmJgg4fr/view?usp=sharing
  - Built multi-factor models with heterogeneous data fusion (50+ Alpha factors), achieving Sharpe ratio > 1.9 and 70%+ active rate.

COURSES & CERTIFICATES

- Coursera: Mathematics for Machine Learning — Linear Algebra Aug 2024 – Sep 2024
- Coursera: Probability & Statistics for Machine Learning and Data Science Dec 2024 – Jan 2025
- Coursera: Calculus for Machine Learning and Data Science Jan 2025 – Feb 2025