HANSEN GAN

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EDUCATION

CARNEGIE MELLON UNIVERSITY, TEPPER SCHOOL OF BUSINESS — New York, NY
Master of Science in Computational Finance - MSCF — ***GRE: 334/340*** — 12/25

JOHNS HOPKINS UNIVERSITY — Baltimore, MD
Bachelor of Science in Applied Mathematics and Statistics, Computer Science, Economics — ***GPA: 3.9/4.0*** — 5/24

- Graduated with triple majors and Departmental Honors in applied math and computer science
- Coursework includes NLP, multivariable calculus, numerical analysis, Bayesian statistics, data structures, algorithms, discrete math, econometrics

EXPERIENCE

SENTIMENT ANALYTICS INC. — Baltimore, MD
Quant Trading Intern — 12/23 – 3/24

- **Signals Construction**: Constructed trading signals for the gold market based hourly sentiments using Google News data; developed multiple medium-frequency trading algorithms with over 30% back-tested return.
- **Position Management**: Managed live spot Gold (XAU/USD) positions exceeding 1 million USD on MT4.
- **Sales and Client**: Sold trading signals and sentiment reports to 300+ paid subscribers.

HUATAI-PINEBRIDGE INVESTMENTS ($65 billion AUM) — Shanghai, China
Quant Research Intern — 8/23 – 10/23

- **Sentiment Analysis**: Deployed LLM for sentiment classification of A-share stocks using sell-side reports.
- **Natural Language Processing**: Supervised fine-tuned chatGLM-6B model with low-rank adaption(loRA), p-tuning, and LangChain, achieving a 10% improvement in output speed and performance.
- **Time Series Forecasts**: Explored knowledge graphs and graph neural networks for financial time series forecasting.

CHINA INTERNATIONAL CAPITAL CORPORATION (CICC) — Beijing, China
Sales & Trading Summer Intern - Fixed Income — 7/23 – 8/23

- **Alpha Mining**: Identified price-volume indicators for 484 Chinese convertible bonds and implemented 10 group back-testing for intraday trading, dating back to 2022.
- **Delta Hedging**: Built a dynamic delta hedging strategy for rebalancing structured products with Monte Carlo methods.
- **Market Making**: Modeled a market microstructure for bid-ask spreads with order size, arrival rate, and inventory.

CHINA INDUSTRIAL SECURITIES — Fuzhou, China
Quant Research Intern — 6/21 – 7/21

- **Machine Learning**: Developed a Federated Learning model for individual credit score prediction focused on privacy.
- **Model Presentation**: Evaluated and presented frameworks, such as FATE and Paddle for multi-machine deployment.

RESEARCH

BASEBALL GAME SCHEDULING OPTIMIZATION — Baltimore, MD
Advised by Prof. Anton Dahbura, Donniell Fishkind — 9/23

- Applied linear and combinatorial optimization and integer programming techniques to baseball scheduling.
- Created 3 season and umpire screw schedules for Minor League Baseball (MiLB) teams, including Appalachian League, Southern League, and Florida Complex League using Gurobi optimizer in MATLAB.

ALPHA DECAY OF MEAN REVERSION STRATEGIES — Baltimore, MD
Advised by Prof. John Miller — 5/24

- Implemented statistical arbitrage strategies by trading pairs of stocks in Nikkei225 and S&P500.
- Found an decline of 5-year rolling Sharpe ratio from 2.1 to 0.7 between 04 to 24, reflecting increased market efficiency.

MONETARY ANALYSIS AND ECONOMIC GROWTH RATE — Baltimore, MD
Advised by Prof. Steve Hanke — 12/22

- Published *A Bibliography on the Economic, Social, and Political Costs of Lockdowns* in the Studies in Applied Economics Working Paper Series (SAE./No. 218/Nov. 2022).
- Analyzed the Golden Growth Rate and credit conditions relative to money supply and inflation for Japan and China.

ADDITIONAL INFORMATION

Interests: Virtual Reality (VR Chat), Stable Diffusion Art, Science Fiction, Violin (level 10)
Skills: Python, STATA, Java, C, C++, R, MATLAB
Languages: Mandarin Chinese (Native), Italian (Basic)