Yuao Peng

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EDUCATION

Cornell University, College of Engineering, Ithaca, New York
Master of Engineering in Financial Engineering, **GPA: 4.058** **Expected Dec. 2024**

Nanjing University, Business School, Nanjing, China
Bachelor of Economics in Finance**, GPA: 4.47/5.0** **June 2023**

Selected Coursework: Machine Learning, Reinforcement Learning, Stochastic Calculus, Optimization, Time Series Analysis, Numerical Methods, Monte Carlo Simulation, Derivative Securities, Data Structures and Algorithms, Econometrics

Selected Scholarships & Awards:
Third Prize**,** People's Scholarship, Nanjing University **Nov. 2021 & Dec. 2022**
Outstanding Team Award, Summer Social Practice Program, Nanjing University **Nov. 2020**

SKILLS

Technical: Python (PyTorch, NumPy, pandas, Matplotlib), C++, R, Excel VBA, MATLAB

EXPERIENCE

Quantitative Research Intern, *Jewellerywater Asset Management Co., Ltd.*, Shanghai, China **Sep. 2022 to Jan. 2023**

- Gathered and filtered financial time series data using Wind financial terminal; conducted correlation analysis between funds, stock indices, and macro indicators; selected well-performed and low-correlated funds based on return and max drawdown to aid the construction of the fund of funds (FOF).
- Built a Markowitz model using Python to compute optimal weights of different fund strategies in the FOF; analyzed the return and risk diversification of the FOF; visualized the effect by plotting the efficient frontiers.
- Back-tested a market-neutral strategy; measured strategy performance in terms of Sharpe ratio, max drawdown, etc., and simulated daily trades for real-market performance analysis.

Account Manager Intern, *Ping An Bank Co., Ltd.*, Nanjing, China **Jan. to Mar. 2022**

- Assisted account managers in conducting due diligence, opening accounts, structuring loans, and handling discounting notes and collaterals for real estate firm clients.
- Engaged in the post-loan management of clients, including analyzing clients' financial reports, and computing key financial indicators to assess loan risks.

ACADEMIC PROJECTS

Movie Review Preference Analysis, *Cornell University*, Ithaca, New York **Dec. 2023**

- Engineered pairs of movie review data into a unified vector to facilitate comparative analysis; built a 4-layer neural network with weight-decay and dropout using PyTorch to predict the preference; utilized Adam optimizer for training, fine-tuning the hyper-parameters using cross-validation; achieved 88% accuracy in identifying the more positive review in each pair, demonstrating the model's effectiveness in nuanced sentiment discrimination in movie reviews.

Thesis: Reliance on Public Information and Funds' Performance, *Nanjing University*, Nanjing, China **Feb. to June 2023**

- Conducted research on metrics for evaluating mutual funds' dependence on publicly available information, and developed one by analyzing funds' holdings alongside sell-side analysts' recommendation data.
- Processed 2GB of raw data into panel data of 360 open-ended equity and hybrid funds in the Chinese mutual fund market spanning 2014 through 2021 using Python; conducted a fixed-effect regression analysis with R, uncovering a notable inverse causal relationship between mutual funds' reliance on public information and their performance.

LEADERSHIP EXPERIENCE

Associate Concertmaster, *Nanjing University Symphony Orchestra*, Nanjing, China **Sep. 2019 to June 2023**

- Led daily operations and rehearsals of the first violin section and organized a Chamber Music Concert; coordinated music selection, stage settings, and logistics.

Summer Social Practice Program Leader, *Nanjing University*, Nanjing, China **July to Aug. 2020**

- Led a team of 8 students to conduct a field study on the present situation of mortar record stores in Chengdu; delivered a research report that won the Top 10 project award.

ACTIVITIES/INTEREST

Violin; soccer; badminton