YUNHO JEON

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EDUCATION

Expected 12/25 **NEW YORK UNIVERSITY** New York, NY
The Courant Institute of Mathematical Sciences
M.S. in Mathematics in Finance
- ***Expected Coursework:*** data-driven modeling, stochastic calculus, optimization, derivative market, machine learning, scientific computing for finance, equity derivatives

08/22 - 05/24 **STONY BROOK UNIVERSITY** Stony Brook, NY
B.S. in Applied Mathematics and Statistics
- ***Coursework:*** linear regression, time series analysis, numerical analysis, data mining
- ***Honors/Awards:*** Award of Honor (Graduated #1 of 600 in Applied Math & Science department)

03/17 - 12/19 **AJOU UNIVERSITY** Suwon, South Korea
B.S. in Financial Engineering
- ***Coursework:*** fixed income securities, options and futures, linear algebra, probability, ODE/PDE
- **Honors/Awards:** Daewoo Scholarship (Ranked #1 of 50 in Financial Engineering for 3 years)

EXPERIENCE

06/24 - 07/24 **ALPHA BETA** Tel Aviv-Yafo, Israel
Quantitative Research Intern (Python, Excel)
- Developed innovative return forecasting model for risk arbitrage strategy using random forest and DNN; attained 31% increase in explanatory power over existing methods
- Analyzed financial statements using large language model (LLM) with prompt engineering to predict future earnings; achieved 4% higher prediction accuracy than financial analysts'
- Designed Python package to automate LLM-based analysis using OpenAI API, receiving and processing LLM outputs into structured and usable data; enhanced processing speed by 4 times

02/24 - 07/24 **STONY BROOK UNIVERSITY** Stony Brook, NY
Undergraduate Research Assistant (Python, Excel)
- Developed Python package to dynamically extract statistical factors that explain relationships between individual stock returns and characteristics using Instrumented PCA method
- Constructed investment strategy for statistical factors, maximizing Sharpe ratio with L1 and L2 regularization and factor number optimization; achieved rolling Sharpe ratio of 1.5
- Performed periodic alpha research by analyzing fitted I-PCA model over past 10 years; verified momentum effect through multiple linear regressions, obtaining alpha of 3% and p-value < 0.01

01/23 - 05/23 **Teaching Assistant**
- Enhanced students' understanding of probability and statistics, including probability axioms, law of large numbers, and hypothesis testing, by holding weekly office hours for 100+ students

PROJECTS

02/24 - 05/24 **STONY BROOK UNIVERSITY** Stony Brook, NY
Alternative Market Beta Research
- Researched academic papers for alternative to market beta, better reflecting market downside risk
- Conducted comparative analysis of conditional drawdown-at-risk (CDaR) beta and traditional market beta using hedge fund indices and S&P 500; verified CDaR beta's superior effectiveness

09/19 - 12/19 **AJOU UNIVERSITY** Suwon, South Korea
Equity-Linked Security Pricing Analysis
- Structured step-down payoff based on 2 stock prices, incorporating early redemption conditions and knock-in, knock-out barriers
- Derived fair price of structured security by solving 2-dimensional BSM PDE with FDM

COMPUTATIONAL SKILLS / OTHER

Programming Languages: Python (Pandas, Numpy, Pytorch, Scikit-learn, SciPy), C++, Excel, SQL
Languages: English (fluent), Korean (native)