

THEODOSIOS DIMITRASOPOULOS

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EDUCATION

Stevens Institute of Technology, Hoboken, NJ *Expected: May 2021*
Masters of Science (MS) in Financial Engineering **GPA: 4.0**
Coursework includes: Financial Machine Learning, Market Microstructure and Trading Strategies, Pricing and Hedging, Portfolio Theory and Optimization, Risk Engineering, Stochastic Calculus, Private Equity and Venture Capital

Princeton University, Princeton, NJ *May 2017*
Bachelors of Science in Engineering (BSE) in Civil & Environmental Engineering; Minor in Architectural Engineering
Coursework includes: Statistical Learning and Data Science, Probability Theory, Statistics, Differential Equations, Honors Linear Algebra, Multivariable Calculus, Computational Design, Java, Finite Element Analysis, Skyscraper Design

PROFESSIONAL EXPERIENCE

Fall Analyst - Instinet, Nomura Securities, New York, NY *Fall 2020 (ongoing)*
• Developing order classifiers for the execution platform (Python); Latency-Sensitive Electronic Trading (LSET).
Summer Analyst - Instinet, Nomura Securities, New York, NY *Summer 2020*
• Supported the development of graph-based order routing tools that reduce execution latency (C/Python); LSET.
Research Engineer - Terreform ONE, New Lab, Brooklyn, NY *2018-2020*
• Led the simulation and fabrication teams through large-scale prototyping in New York, Shenzhen and Tel Aviv;
• Authored grant proposals and presented to investors and the public (>200 people in 4 instances).
Project Manager - NOARCHITECTURE, New York, NY *2017-2018*
• Coauthored and published a peer-reviewed article on applications of computational fluid dynamics in urban planning.

SKILLS

Programming Python (Tensorflow, Keras, Pytorch, NLTK, TA-Lib), C, UNIX/Linux, Git, VBA, HTML/CSS
Software Microsoft Visual Studio, PyCharm, Anaconda, Microsoft Excel, Typesetting (LaTeX)
Modeling Time Series Forecasting, Credit Risk Modeling, Portfolio Optimization, Algorithmic Trading Strategies

RESEARCH

Applications of Machine Learning in Quantitative Wealth and Investment Management (Industry Research)
• Designing scenario generators for portfolio optimization using popular Deep Learning frameworks, in collaboration with the Chief Investment Office, BofA Securities. (*ongoing*)
Applying sentiment analysis on FOMC Communications to predict the Federal Funds Rate (Transformers)
• Implemented the BERT language model on FOMC minutes, press conference and meeting transcripts to predict the direction of interest rates (increase, no change, decrease).
Regime Detection using Hidden Markov Models and Support Vector Machines (scikit-learn)
• Created/backtested HMM and SVM classifiers on ETF time series to improve short-term predictions for stock returns.
Asian Options Pricing using Monte Carlo simulations and Lévy matching-moments (Tensorflow, Keras)
• Built a Monte Carlo pricing simulator and implemented the Lévy matching-moments method to measure performance.

ACTIVITIES

Social Chair - Terrace Club, Princeton, NJ *2015-2017*
• Hosted social events and activities for 180 student members, managing a \$250,000 annual budget
Student Athlete - Princeton Varsity Lightweight Rowing Team, Princeton, NJ *2013-2015*
• Balanced weekly 20-hour practice sessions and weekend regattas with the above (men's coxed eight, bowman)

Available for full-time employment starting Summer 2021