Michael J. Lewis

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I have worked over a decade in fast-paced environments solving problems others couldn't. By leveraging an extensive background in research and advanced mathematical and computing techniques, an industrious work ethic, and honed coding skills, I develop new and innovative methods to obtain improved results.

Work Experience

Bank of America Merrill Lynch New York City, NY.
Vice President, E-Trading Quant 2023 - 2025

- Work with traders to design factor model for the AMRS HY desk
- Designed a tool for performing parameter sensitivity
- Designed & integrated "order book" tool to address desk concerns of market crossing
- Performed assorted data analysis requests by trading desk

Goldman Sachs Asset Management New York City, NY.
Vice President, Multi Asset Solutions (MAS) Strat 2019 - 2023

- Lead integration of ESG data for benchmark / position analytics, and projects on ESG related research
- Project lead in Managed Accounts JV w/ Next Capital, as well as in-house glidepath analytics
- Improve accuracy, speed, and robustness of portfolio optimization processes
- Research quantitative trading signals

Guggenheim Partners / Delaware Life New York City, NY.
Vice President, Quantitative Researcher 2016 - 2018

- Designed and implemented high-performance systems in Perl and Python
- Consulted on risk management and performance metrics
- Interviewed, curated, and managed a team of quantitative researchers / strategists
- Researched literature, Machine Learning in particular, and developed investment strategies
- Co-authored with M. López de Prado:
  "Detection of False Investment Strategies Using Unsupervised Learning Methods"

Courant Institute of Mathematical Sciences New York City, NY.
Ph.D Candidate / Research Assistant under Jonathan Goodman 2010 - 2016

- Applied Markov Chain Monte Carlo methods, Bayesian analysis to the study of cryo-electron microscopy

Banc of America Securities New York City, NY.
Financial Analyst / Associate in the RMBS Modeling Group 2005 - 2008

- Supported and enhanced mortgage prepay model for trading desk
- Supported Modeling and Strategist groups for RMBS
- Ran mortgage delinquency and prepay analysis for ad hoc trading desk requests
- Led QA testing projects on DB

Education

Courant Institute of Mathematical Sciences, NYU **New York City, NY**
Ph.D. Mathematics 2016 (GPA: 3.9/4.0)
M.S. Mathematics 2012
Accolades: Henry M. MacCracken Fellowship, Member of American Mathematical Society (AMS)

Massachusetts Institute of Technology **Cambridge, MA**
S.B. Mathematics, Minor in Economics 2004 (GPA: 4.4/5.0)

Related Coursework:
Numerical Methods / Analysis / Optimization, Monte Carlo Methods, PDEs, Numerical Methods for PDEs, Probability, Statistics, Mathematical Modeling, Stochastic Optimal Control, Financial Theory, Game Theory, International Trade, Behavioral Economics, Data Structures, Algorithms, High Performance Computing

Computer Skills / Other

- *Programming Languages*: Slang, Python (strong), Java, PERL, C++ (moderate)
- *Software*: Microsoft Office, iPython, Matlab, R, LaTeX, SQL / kdb
- *Skills*: Data Science, Math Modeling, High Performance Computing
- *Certifications*: Passed the Series 63 and Series 7 Exams (2006)