MICHAEL ANG

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EDUCATION

NEW YORK UNIVERSITY (CIMS) New York, NY
MS in Mathematics in Finance (Sep 2017 – Jan 2019) (GPA: 3.88) *Spring 2018 Director's List*

UNIVERSITY OF CAMBRIDGE Cambridge, UK
BA in Mathematics (Oct 2014 – Jun 2017) (First Class Honors) 2017 *Georges Lemaître Prize*

EXPERIENCE

MAVERICK DERIVATIVES Amsterdam, NL
Quantitative Trader (Aug 2021 – Present)

- Found trading opportunities through researching and analyzing publicly available information
- Monitored existing positions and maintained efficient trade execution during rebalancing
- Built trading infrastructure, software modules and scripts
- Ensured compliance of existing positions to internal risk limits and external regulations

BLOOMBERG L.P. New York, NY
Quantitative Researcher (Jan 2019 – Jun 2021)

- Developed trading strategy pipeline from Bloomberg news sentiment data using ICA methods
- Created algorithms for identifying and classifying errors in analyst earnings reports; used a mix of rules-based and systematic heuristics in an environment with few ground-truth samples
- Tested SABR model approximations used in pricing interest rate swaptions
- Wrote data tools in Python: multi-dimensional PDE solvers, Cython functions, data query packages, option volatility surface GUIs, interactive graphs via bqplot

AQR CAPITAL MANAGEMENT Greenwich, CT
Research Intern (Jun 2018 – Aug 2018)

- Improved existing algorithms for converting raw signal data into factors: removed or modified the portfolio scaling, regression and combination steps; compared relevant metrics after back-testing
- Constructed factor from 2IQ insider trading data set: implemented ideas from academic paper; replicated results; created factor eventually added to AQR execution factor database

PROJECTS

Exploration vs Exploitation in Stationary Multi-Armed Bandit Problems (SSRN paper) (Jul 2021)

- Developed Bayesian framework for solving bandit problems with unknown reward distributions
- Derived properties of optimal strategies and their general form under specific distributions
- Computed upper/lower limit for decision boundaries; obtained numerical results through simulations under the normal distribution

Functional Attribution (SSRN paper) (Oct 2019)

- Investigated how changes in multivariable functions can be explained via the underlying parameters
- Created a foundation for this field of math and established links to current schemes (e.g. Shapley)

Conditional Hypothesis Testing (SSRN paper) (Jun 2019)

- Developed a technique for controlling test size during multiple hypothesis testing
- Created efficient numerical algorithm for fast implementation of the technique

SKILLS/OTHER

Software: Python, SQL, Java, MATLAB, Bloomberg Terminal, LaTeX,
Skills*:* Data science for financial data, Time-series analysis, Numerical methods, Statistical modelling, Linear and nonlinear programming, Probability theory, Factor investing, Portfolio optimization, Developing and back-testing trading strategies, Data visualization in Python
Publications*:* '*Network Traffic Classification via Neural Networks'* (Technical Report)