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

GSR MARKETS   Singapore
Quantitative Trader (Sep 2022 – Dec 2023)
- Responsible for operation of trading engines during APAC hours: maintaining quoting KPIs for exchanges and clients, monetizing altcoin options, monitoring book risk and PnL
- Researched, backtested and deployed modifications to engines that improved engine performance and reduced slippage: calibration of EMA constants, timeout delays, signals for widening quotes
- Built and maintained Python libraries on GitLab used by trading team for data analysis and monitoring engines (Numpy, Pandas, Job scheduling, Database connectors, Slack API, Google Sheets API, Requests API)

MAVERICK DERIVATIVES   Amsterdam, NL
Options Trader/Python Developer (Aug 2021 – May 2022)
- Co-managed US markets volatility dispersion book for technology sector (QQQ, IGV).
- Responsible for rebalancing positions, analysing risk and margin requirements, optimizing trade execution and finding new trading opportunities
- Built visualization tools, conducted data analysis on trades and automated daily procedures via Python scripts (Asyncio, Dash, Redis servers, SQL, Websockets, Matplotlib)

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

PUBLICATIONS

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

Functional Attribution (SSRN Oct 2019)

Conditional Hypothesis Testing (SSRN Jun 2019)

Network Traffic Classification via Neural Networks (University of Cambridge Sep 2017)

SKILLS/OTHER

Software: Python (Primary Language), SQL, Java, C++, 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, Developing and back-testing trading strategies, Data visualization in Python, Option dispersion trading, Position and book management, Automated Spot Market Making, Trade Monitoring, Execution Trading and Research