

## MICHAEL ANG

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### EDUCATION

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#### NEW YORK UNIVERSITY (CIMS)

**MS in Mathematics in Finance** (Sep 2017 – Jan 2019) (GPA: 3.88)

New York, NY

*Spring 2018 Director's List*

#### UNIVERSITY OF CAMBRIDGE

**BA in Mathematics** (Oct 2014 – Jun 2017) (First Class Honors)

Cambridge, UK

*2017 Georges Lemaître Prize*

### EXPERIENCE

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#### 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 tools in Python library for data analysis jobs and Slack engine monitoring alerts

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#### 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)

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#### 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

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#### 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

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**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

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**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