### Top Skills

Statistical Arbitrage Data Analysis Trading Strategies

#### Certifications

Automata Theory

Data Analysis

Modelling Experimental Data (Graduate Diploma)

Statistical Inference (Graduate Diploma)

Probability (Graduate Diploma)

#### **Quant Trader**

London, England, United Kingdom

## Summary

Experienced Quant and Trader with a demonstrated history of working in the investment banking industry. Skilled in Electronic Trading Systems, Trading, Quantitative Research, and Development. Strong finance professional with a Doctor of Philosophy - PhD focused in Mathematical Finance from Imperial College London.

# Experience

NatWest Markets Plc Quantitative Analyst September 2021 - Present (2 years 10 months) London, England, United Kingdom

Fixed Income relative value and backtesting framework.

DMO auction strategies.

Multivariate statistical methods for quant trading.

RFR OIS and bond curve construction.

Multiple data sources: Kdb, SQL, Bloomberg, unstructured data, in-house.

#### Private

Quant Trader and Research February 2012 - August 2021 (9 years 7 months) London, United Kingdom

Quant trading strategy research.

Stat arb.

Backtesting in R and C++.

Market data management and data cleaning in Python and C++.

Python 3 psycopg2, to PostgreSQL DB. C++ libpqxx to PostgreSQL DB.

Royal Statistical Society modules on statistical inference, regression and time series modelling.

R quant trading library written in C++11 using Rcpp.

Experienced in OOP C++14/C++17, Python 3, R, SQL.

Mizuho International plc Senior Trader and Quant July 2005 - December 2011 (6 years 6 months)

London, United Kingdom

Fixed Income quant strategy research and analytics.

ION trading system analytics, including multithreaded event-driven pricing engine.

Yield curve and OIS swap analytics for Excel C++ and ION. OIS testing for Bloomberg.

Swaps trader in USD, JPY, EUR, eurodollar bond futures and FX.

Market making swaps and options, fixed Bermudans, callable CMS spreads, reverse floaters, CRANs, PRDCs.

Mitsubishi UFJ Securities International plc Quantitative Analyst November 2000 - May 2005 (4 years 7 months) London, United Kingdom

Cross asset modelling, FX, interest rate futures, swaps, exotic IR and FX. CMS swaps and spreads, PRDCs.

Libor market model (BGM).

Monte Carlo methods, low-discrepancy sequences and variance reduction techniques.

Book hedging.

Managed C++ library and parallel processing.

### Education

Imperial College London

Doctor of Philosophy - PhD, Mathematical Finance · (1995 - 1999)

Imperial College London

Bachelor of Science - BS, Mathematics · (1992 - 1995)