Talha Jamal

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EDUCATION

Aug 2023 - Imperial College London

London, UK

Aug 2024 MSc Financial Engineering

Machine Learning, Financial Statistics, Stochastic Calculus, Advanced Options Theory, Portfolio Management, Computational Finance in C++, Advanced Financial Statistics, Data Structures and Algorithms

Aug 2017 - The University of Manchester

Manchester, UK

Aug 2020

B.Eng Electrical and Electronic Engineering, First Class Honours

Mathematics, Numerical Analysis, Signals and Systems, Data Networking, Computer Systems Architecture Dissertation: Human Activity Recognition using Time Series Data with CNNs and LSTM RNNs

Work Experience

June 2021 - S&P Global Market Intelligence July 2023 Quantitative Specialist

Islamabad, Pakistan

- Gained research experience by modeling quantitative research and portfolio optimization workflows for 20 North American and EMEA clients, leveraging Compustat, CIQ, and Short Interest datasets
- Simulated proprietary momentum, mean reversion, and factor investing strategies for clients using C++ scripts, reducing runtime by 10% and accelerating portfolio rebalancing for clients
- Developed Python scripts to manipulate time-series and point-in-time data for visualization in Tableau, making an Alteryx subscription redundant, resulting in cost savings of \$100k
- Formulated a strategy with Product Management Team to introduce ClariFI's API to clients, created 5 sample interactive Python notebooks, and delivered demos and training sessions to clients globally
- Initiated a repository and version control system for API and automation scripts, enhancing team collaboration and ensuring efficient organization, retrieval, and preservation of code
- Built strategic relationships with institutional asset management firms and trading desks of investment banks by aligning product features with client requests, resulting in a 100% client renewal rate and \$960k Annual Cumulative Value for 10 North American and EMEA clients under my management

July 2019 - Bykea - Ride-Hailing Startup Sep 2019 Data Analyst - Intern

Islamabad, Pakistan

- \bullet Engineered a solution to distribute performance-driven incentives to highest-performing riders resulting in a growth of 5% in total completed rides
- \bullet Automated management of large CSV files and their associated file structure through PowerShell and Batch Scripts, improving team productivity by 5%

ACHIEVEMENTS

2018 - 2020 Technology Startup Mentor, Manchester Entrepreneurs

Manchester, UK

• Mentored a cohort of 20 start-ups at AccelerateME, a student-led start-up accelerator, culminating in a Demo Day where start-up founders pitched business ideas and products to 500 investors

Additional Skills

Programming Languages: Python, R, SQL, C++, Batch Scripts, PowerShell

Tools: VScode, PyCharm, Databricks, SSMS, Git/GitHub

Languages: English, Urdu, Pushto (Trilingual) Certifications: CFA Level 1 (passed April 2022)

EXTRA CURRICULAR ACTIVITIES

• Reading, Running, Football, and Hackathons (Runner up in Morgan Stanley 2023 Systematic Trading Competition)

Mr. Talha Jamal +44 (0) 787 3466351 tj23@imperial.ac.uk

NatWest Markets Graduate Trainee – Quantitative Analyst

Dear Sir/Madam,

I am a Financial Engineering student at Imperial College London and wish to apply for the Graduate Trainee – Quantitative Analyst role at NatWest Markets.

The role's quantitative nature demands expertise in leveraging large datasets to build mathematical models for algorithmic trading. My engineering background embedded a strong foundation of linear algebra and calculus in me, helping me learn advanced modeling techniques. As a Quantitative Specialist at S&P, I independently lead research projects – from signal construction to backtesting trading strategies – fostering a detail-oriented approach to alpha research. A notable project of mine was creating an Earnings Surprise Trading strategy for the Head of US Equity Strategy at RBC Capital Markets. I engineered my trade execution to lag the signal by a day if earnings were released after market hours to avoid lookahead bias. I aim to improve my backtesting skills further at NatWest.

Working in a global team, I proposed and collaborated with various colleagues on multiple projects, enhancing my communication and problem-solving skills. A significant achievement of mine was working with Product Management to spearhead a project to rewrite Alteryx workflows as Python Scripts, making Alteryx redundant and saving the firm \$100k. Initiating this project taught me the value of being a self-starter and the impact of my contributions.

I am excited about the opportunity to join NatWest Markets and become an integral part of the Quantitative Analytics Team. I look forward to working alongside seasoned Traders and Quants on derivative trading desks, applying my knowledge of financial mathematics to contribute to the firm's performance in financial markets. The global nature of the firm offers the prospect of cross-border collaboration and cross-cultural learning. The thriving entrepreneurial culture promotes bold and creative thinking in research—an ideal match for my aim to engineer innovative solutions on projects from day one. NatWest Market's impressive track record of talent retention makes it more than a stopover in my professional journey; it stands out as a destination.

I seek opportunities that will push the boundaries of my problem-solving abilities and give me the necessary resources to tackle them. With its reputation for fostering talent and nurturing a culture of continuous learning, NatWest Markets seems tailor-made for my aspirations.

I look forward to discussing my application further in an interview.

Yours faithfully, Talha Jamal