**TALHA JAMAL**

+92 3121952888 tj23@imperial.ac.uk

EDUCATION

**2023 - 2024** **Imperial College Business School London, UK**

*MSc Risk Management & Financial Engineering*

*Machine Learning, Financial Statistics, Advanced Financial Statistics, Computation Finance in C++,*

*Stochastic Calculus, Advanced Options Theory, Financial Engineering, Data Structures and Algorithms*

**2017 - 2020** **The University of Manchester Manchester, UK**

*B.Eng. Electrical and Electronic Engineering, First Class Honours*

*Mathematics 1E1, Mathematics 1E2, Mathematics 2E1, Numerical Analysis, Concurrent Systems,*

*Signals & Systems, Data Networking, C Programming, Computer Systems Architecture*

*Dissertation: Human Activity Recognition using Time Series Data with CNNs and LSTM RNNs* – [Link](https://github.com/talhajamal11/Human-Activity-Recognition-using-CNN-and-LSTM-RNN).

WORK EXPERIENCE

**2021 - 2023 S&P Global Market Intelligence Islamabad, Pakistan**

**Quantitative Specialist, Investment Management**

* Modelled quantitative research and portfolio management workflows for 20 clients in North America, EMEA, and APAC with S&P’s quant research product called ClariFI
* Simulated proprietary momentum, mean reversion, & factor investing strategies for clients via C++ scripts, reducing runtime by 10% and streamlining month end 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 to integrate the ClariFI API for clients, created 5 sample interactive python notebooks and delivered API demos to a global client base
* Gained research experience in feature generation via construction of alpha factors leveraging R and ClariFI’s visual query language, helping 10 clients build internal trading signals
* Automated tasks using Batch and PowerShell Scripts, enhancing team productivity by 5%
* Validated 2 new datasets, such as Short Interest Data, following S&P and IHS Markit’s merger to ensure data was clean, consistent, and relevant to clients
* Initiated and developed a repository and version control system for API and automation related scripts, ensuring efficient organization, retrieval, and preservation of code
* Facilitated communication between clients and developers by aligning product features with client requests, resulting in a 100% renewal rate and $960k ACV for 10 North American & EMEA clients

ACHIEVEMENTS

**2020 Technology Start-up 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 with start-up founders pitching business ideas and products to 500 investors

**2018 - 2020 EEE Pass Scheme Leader & Coordinator Manchester, UK**

* Lead the Peer Assisted Student Support scheme across the Electrical and Electronic Engineering Department, helping 360 junior students navigate academic and personal lives at university

ADDITIONAL SKILLS

**IT SKILLS**

Programming Languages: Python (advanced), C++ (Intermediate), SQL (Intermediate), R (Basic)

Scripting Languages: Batch Scripts (Intermediate), PowerShell (Basic), Linux/Bash (Basic)

**SELECT PROJECTS**

Visualizing a Nasdaq Market Order Book – [Link](https://github.com/talhajamal11/Visualizing-an-Order-Book).

Practicing Data Structure and Algorithm Exercises from Jay Wengrow’s DSA Book – [Link](https://github.com/talhajamal11/Data_Structures_and_Algorithms).

**LANGUAGES**

English (fluent), Urdu (Native), Pashto (Native)

**CERTIFICATIONS**

Passed CFA Level 1, April 2022.

EXTRA CURRICULAR ACTIVITIES

* Engaging in routine endurance exercises with the goal of running in the 2025 London Marathon