#### **EDUCATION**

#### 2023 - Imperial College London

**Present** MSc. Risk Management and Financial Engineering

Financial Statistics, Advanced Financial Statistics, Stochastic Calculus, Advanced Options Theory, Market Microstructure: Trading and Liquidity, Computational Finance in C++, Financial Engineering

## 2017 - The University of Manchester

**2020** B.Eng. Electrical and Electronic Engineering, First Class Honors

Numerical Analysis, Computer Systems Architecture, Digital Signal Processing, Control Systems, Data Networking, Engineering Maths, Mathematics 1E1, Mathematics 1E2, Mathematics 2E1

# TECHNICAL SKILLS - GitHub Link: https://github.com/talhajamal11

$\Diamond$	Python	$\Diamond$	kdb+	$\Diamond$	Batch Scripts	$\Diamond$	Docker
$\Diamond$	C++	$\Diamond$	SQL	$\Diamond$	PowerShell	$\Diamond$	Jenkins
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 $\diamond$  R  $\diamond$  DBMS  $\diamond$  Linux  $\diamond$  Version Control

### **Personal Projects**

- Human Activity Recognition using Time Series Data with CNNs and LSTM RNNs <u>Link</u>.
- ♦ Visualizing a Nasdaq Market Order Book using Python <u>Link</u>.
- ♦ Practicing Data Structure and Algorithm Exercises from Jay Wengrow's DSA Book <u>Link</u>.

#### **WORK EXPERIENCE**

# 2021 - S&P Global Market Intelligence 2023 Quantitative Specialist, Investment Management

- ♦ Knowledge Expert of ClariFI, a Quantitative Research and Portfolio Management Product.
- Quantitative expert on Factor Backtesting, Event Study, Algorithmic Trading, Forecast Modelling,
  Portfolio Optimization and Portfolio Attribution.
- ♦ Gained Research Experience in Feature Generation using R and ClariFI's internal visual query language exploring SPGMI and IHS Markit's fundamental, market and alternative datasets.
- Developing Python Scripts to process and transform time-series and point-in-time data for seamless integration into Tableau, catering to client's request for data visualization.
- ♦ Building and Backtesting Trading Strategies for clients using C++ e.g., created momentum, mean reversion, statistical arbitrage and factor investing strategies to create Market Neutral Portfolios.
- ♦ Utilized SQL queries to generate attributes for ClariFI's Security Master using Compustat Data.
- Enhanced Team Productivity by automating tasks using Batch and PowerShell Scripts.
- Spearheaded the development and integration of ClariFI's API by collaborating with Developers and creating interactive notebooks to demonstrate the capabilities of the API to clients.
- ♦ Led the development of a repository and version control system for automation scripts created by the Quant Specialists team at S&P fostering improved collaboration amongst team members.
- ♦ Facilitated communication between clients and the developer team by aligning product features with client requests and overseeing User Acceptance Testing, enhancing my commercial acumen.

# **Interests and Achievements**

- ♦ Passed CFA Level 1
- Reading books related to Mathematics, Statistics, Programming and Quantitative Finance.
- Regularly watching Mathematics and Machine Learning lectures from 3blue1brown and Stat Quest on YouTube.