

Tosin Ogundimu

EDUCATION

Imperial College London

Oct 2021 – June 2025

Master of Engineering in Mechanical Engineering

Relevant Modules: Statistics(88.5%), Mathematics and Computing, Machine Learning, Advanced Optimisation

EXPERIENCE

Application Developer Intern | PostgreSQL, AWS S3, Python, pytest

June 2024 – Present

Quantile - A London Stock Exchange Group Business

London

- Developed automated data masking pipeline extracting large data sets from AWS S3 buckets using Python, Pandas, NumPy and PostgreSQL in a Linux environment, increasing process efficiency by 50%
- Implemented data cleaning and validation techniques to ensure a robust pipeline
- Used psycpg and DBeaver to query and extract insight from PostgreSQL Database
- Worked using agile methodology with JIRA and Confluence to refactor legacy code increasing code coverage by 15% and reducing failed unit tests to 0, using pytest to develop unit tests with BDD and TDD approaches
- Developed new regression tests and overhauled existing methodologies, increasing regression test coverage by 213%
- Worked in interest rate swaps and FX compression teams alongside counterparty risk

Virtual Quant Trading Challenge

Aug 2024 – Aug 2024

Akuna Capital

- Selected after a rigorous application process to compete in quant trading challenge

Quant Trading Workshop

Oct 2023 – Oct 2023

IMC Trading

London

- Selected as one of 25 to gain hands-on experience in market making, options theory, and high frequency trading
- Developed trading strategies using Python on a mock exchange, generating a simulated profit of 40%

Hackathon | Flask, Postman, Python, Git

Oct 2023 – Oct 2023

Google

London

- Collaborated in a team of 5 to build an app to help students with interviews as Backend Developer
- Developed backend database using Python and Flask with Git for version control and using JavaScript in the frontend, creating REST api endpoints with Flask and testing with Postman

Commercial (Product) Management Intern

June 2023 – Sept 2023

BT

London

- Analysed competition and produced report, presenting findings to senior stakeholders, leading to actionable product offering improvements that enhanced market positioning, by communicating with cross-functional teams
- Designed training materials with key stakeholders to, enhancing the sales team's product knowledge which led to an 18% increase in sales proficiency and regulatory knowledge, working with technical and non-technical colleagues

PROJECTS/CERTIFICATIONS

Pairs Trading Quantitative Analysis | Python, Pandas, sklearn, SciPy, StatsModels

- Conducted quantitative analysis to evaluate pairs trading strategies with commodities Brent Oil and WTI Oil
- Utilized Pandas and sklearn for data analysis, processing and performed time series analysis, facilitating the analysis of correlation and regression results between trading pairs and backtested strategy
- Developed linear regression models with scikit-learn, SciPy, StatsModels to determine price sensitivity between commodities, optimizing the hedging ratio and identifying mean-reverting relationships and cointegration

Carbon Monoxide Concentration Forecasting | Python, Matplotlib, Seaborn, NumPy, Pandas

- Developed a multivariable linear regression model to predict the concentration of Carbon Dioxide using historical time series data, achieving 88% accuracy in predicting the concentration

TECHNICAL SKILLS / EXTRACURRICULARS

Languages: Python, C, SQL (Postgres), JavaScript, HTML/CSS

Frameworks: React, Node.js, Flask

Developer Tools: Git, AWS, S3, VS Code, Linux, JIRA, Confluence, Postman, DBeaver, Grafana

Libraries: Pandas, NumPy, Matplotlib, pytest, SciPy, Seaborn, Tensorflow, Matplotlib, sklearn, StatsModels

Extracurriculars: Algorithmic Trading Society, Investment Society, Baseball Society