Franklin Chukwuemeka

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ABOUT ME

Data science-driven analyst with a passion for applying quantitative analysis and AI solutions to complex financial challenges. Possesses a strong foundation in finance combined with a deep understanding of quantitative analysis and machine learning.

WORK EXPERIENCE

Financial Analyst

Quantum Nexus Capital [03/2024 – Current]

City: Remote | **Country:** Estonia

Link: https://github.com/franklinchuks/Algo_Trading.git

I put together a strong analytical skillset, in-depth knowledge of financial markets, and proficiency in programming languages to develop quantitative strategies. My experience includes building profitable algorithmic bots for the commodities market at QNC, 3 of which were based on my own strategies. These strategies deliver consistent returns, with even the lowest performer netting at least 25% annual ROI, a Sharpe Ratio of 0.7, and a maximum drawdown of 15% (depending on lot size).

Here are my key job functions:

- Analysis of fundamental factors affecting commodity prices, including production levels and geopolitical events.
- Recommending hedging strategies to mitigate price volatility and protect against adverse market movements.
- Developing more than 10 profitable stock trading bots using Python and algorithmic trading bots in C#.

I am constantly expanding my knowledge and exploring new areas like Quantitative Trading (Quant) to further refine my analytical and algorithmic expertise, also integrating Artificial Intelligence (AI) to optimize strategies.

Technical Lead

University of Tartu Centre for Applied Social Sciences (Internship) [06/2023 – 02/2024]

City: Tartu | **Country:** Estonia

Link: https://github.com/franklinchuks/CASS_ASS.git

- Leading a multidisciplinary team of developers and analysts in the successful execution of data science projects
- Conducting thorough testing, validation, and verification processes to ensure the quality, robustness, and reliability of data science solutions.

Data Analyst

Tipline Services [2020 – 2022]

- Collected, organised, and managed diverse environmental data from sensors, databases, surveys, and external sources.
- Visualised findings through charts, graphs, and maps for effective communication (Power BI).
- Utilized Geographic Information Systems (GIS) for spatial analysis.

Software Developer

Basexcel Technologies [2017 – 2020]

- Proficient in Python programming and web frameworks (Django, Flask)
- Experienced in React.js with a focus on component-based architecture and state management (Redux)
- Skilled in API development and integration, including RESTful APIs and GraphQL

University Research Assistant

Chukwuemeka Odumegu Ojukwu University [2016 – 2018]

Research Assistant to Professor Ugochukwu Paul Orajaka, Department of Entrepreneurship Studies.

- Conducted in-depth data analysis using statistical software (Python, Stata, Matlab) for economic research projects.
- Performed econometric analysis to investigate economic relationships and test hypotheses.
- Drafted and edited research proposals, ensuring clarity and adherence to funding agency guidelines.

EDUCATION AND TRAINING

Master's Degree in Quantitative Economics

University of Tartu [2022 – 2024]

Address: 18 Ülikooli, 50090 Tartu (Estonia)

Bachelor's Degree in Banking and Finance

Chukwuemeka Odumegwu Ojukwu University [2012 – 2016]

GIS - Geographic Information Systems Training Workshops

Tipline Environmental Services [2020 – 2022]

CRM - Customer Relationship Management

Golden Tulip Hotel and Resorts [2018 – 2020]

Website: https://www.goldentulip.com/

CCNA - Cisco Networking and Programming

Basexcel Technologies Ltd [2017 – 2018]

Chartered Post-Graduate Diploma

Customer Relationship Management Institute [2016 – 2017]

PMP - Professional Certificate in Project Management

Novelle Professional Training Center [2016 – 2017]

PROJECTS

[01/01/2024 – Current]

Culture, ESG Performance and the Environmental Kuznets Curve: A Panel Data and Machine Learning Perspective This paper intricately explores the dynamic relationships among culture, environmental, social, and governance (ESG) performance, and the Environmental Kuznets Curve (EKC) across 100 countries during the period 2000 to 2022.

Link: https://github.com/franklinchuks/Culture_ESG_EKC_THESIS

UI Tests Using Selenide Framework Created a series of UI tests focusing solely on the Factoring calculator, ensuring comprehensive coverage of its functionalities. Test Documentation: Accompanying the tests, I have documented various test scenarios and cases that have been employed during the testing process in the github-readme file. Test Summary: A summary report of the testing outcomes is included, highlighting key observations and results.

Link: https://github.com/franklinchuks/HW.git

Factoring Calculator UI Replicated SwedBank's Factoring Calculator using react.js.

Links: https://github.com/franklinchuks/SWEDBANK_HOMEWORK.git | https://www.swedbank.lt/business/finance/trade/factoring?language=ENG

Heterogeneity and Robustness of the Kuznets Curve (2024) This study investigated the validity and consistency of the Kuznets curve hypothesis, which suggests that economic growth initially worsens and then improves environmental quality and income distribution.

Link: https://github.com/franklinchuks/Heterogeneity-and-Robustness-of-the-Kuznets-Curve/tree/main

Sentiment Analysis of Movie Reviews (2023) Created a natural language processing model to label movie reviews as positive or negative using Python, NLTK, Scikit-learn, and TensorFlow.

Link: https://github.com/franklinchuks/Machine_Learning_Movie_Recommendation_and_Rating

Time Series Analysis of Performance of Environmental-Friendly Stocks (2022) This article reports on a project done in RStudio that compares the performance of Tesla Inc. (TSLA), a green stock, and Toyota Motor Corporation ™, a non-green stock, from 2011 to 2022 using various statistical and econometric methods such as descriptive statistics, box plots, ACF, PACF, ARIMA, ARMAX, AIC, ARCH, GARCH, and RSI as an external variable.

Link: https://github.com/franklinchuks/Time-Series-Analysis-of-Performance-of-Environmental-Friendly-Stocks-/tree/main

Color Detection (2021) This is a fun and simple project that shows how to use computer vision and data manipulation techniques to make a useful application.

Link: https://github.com/franklinchuks/Movie_Review_Analyzer/blob/main/color_detection.ipynb

HOBBIES AND INTERESTS

Interests Board games, watching football, making research on data related issues.

SKILLS

TECHNICAL SKILLS

Programming Skills: Proficient in Python, C++, JavaScript, MATLAB, R, with experience in developing and implementing data-driven solutions for complex problems

Software Tools: Strong expertise in Microsoft Office Suite (Word, **Excel**, PowerPoint) and Power BI for data visualisation and analysis, as well as Figma for UI/UX design and Primavera for project management

Database Management: Skilled in managing and analysing large datasets using SQL and proficient in database management concepts, ensuring data integrity, security, and performance

OTHER ATTRIBUTES

- Strong **technical writing skills** demonstrated through extensive experience in preparing economic reports.
- Experienced in delivering **dynamic presentations** to diverse audiences
- **Communicating effectively** with people from diverse cultural backgrounds, showing cultural sensitivity