Zikora Chinedu

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EDUCATION

University of Toronto

Toronto, ON

Bachelor of Science in Computer Science, Minor in Mathematics/Statistics | GPA: 3.75/4.0

Sep. 2023 - June 2027

EXPERIENCE

Quantitative Finance Analyst

Sept 2024 – Present

Sharpe Financial Research Group

Toronto, ON

- Executed **backtesting analysis** across **30** different portfolio combinations of S&P 500 stocks using **Python** and data analysis frameworks such as **Pandas** and **NumPy**.
- Implemented multi-strategy portfolio analysis framework processing 10-stock portfolios with daily rebalancing, achieving maximum Sharpe ratio of 0.81 and minimizing drawdown to 22.71%
- Utilize my programming and ML skills to assist in the construction of advanced financial models and conduction
 of quantitative research.

Machine Learning Intern

May 2024 – July 2024

Ecobank Transnational Incorporated

Lagos, Nigeria

- Leveraged **machine learning models** and conducted extensive **EDA** to develop predictive analytics solutions, including salary prediction and loan default forecasting, enhancing data-driven decision-making.
- Utilized **Python** and **NLP** techniques to develop a framework for the company's chatbot, using **data preprocessing**, **intent recognition**, and **response generation** to enhance user interactions.

PROJECTS

Salary Predictor | Python, Pandas, Matplotlib, Scikit-learn, NumPy

- Created a salary predictor that used **exploratory data analysis** and **machine learning algorithms** to predict salaries based on numerical and categorical data.
- Developed custom **Matplotlib** functions to programmatically generate and display graphs, streamlining the data visualization process and eliminating the need for manual data entry.
- Evaluated multiple algorithms and used the best model, Random Forest Regression, for predictions.

Loan Default Predictor | Python, Pandas, Matplotlib, Scikit-learn, NumPy, Seaborn

- Created a loan default predictor that used **Exploratory Data Analysis** and **Logistic Regression** to predict whether someone would default on a loan or not based on given parameters such as Education, Credit History, etc.
- Preprocessed data by handling missing values, standardizing numerical data, and encoding categorical variables.
- Compared the Logistic Regression model against SVC, Random Forest Classifier, and a neural network to ensure robustness
- Used a confusion matrix to check the efficacy of the model.
- Achieved an accuracy of **79**%, a weighted precision of **78**%, and a **weighted recall** of **79**%, and an weighted f1-score of **78**%.

Sokoban Game | Assembly, RISC-V 32, OOP

- Used Assembly to make a popular game, Sokoban, that runs on a RISC-V 32-bit processor.
- Implemented **OOP** principles to create a modular and scalable game.
- Supports multiplayer, and displays a leaderboard at the end of the game. Also supports multiple boxes.
- Used the stack to store players and their moves, making use of static memory allocation.

Paint Application | Java, JavaFX, OOP, Design Patterns

- Worked in a team of 3 in developing a paint application using Java
- Used JavaFX to handle the drawing and filling of shapes, and creating a user-friendly interface.
- Utilized the Factory Design Pattern to create different shapes, and to keep the code modular and scalable.
- Added resizing, undo/redo and background/shape color changing functionalities.

TECHNICAL SKILLS

Languages: Python, HTML/CSS, Java, C, Assmebly, JavaScript

Developer Tools: Git, VS Code, Visual Studio, PyCharm, JetBrains IDEs, CPUlator

Libraries: pandas, NumPy, Matplotlib, PyTorch, Tensorflow, Transformers, yfinance, Scikit-learn, spaCY, Seaborn,

JavaFX