Syed Waliullah

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Summary

Software Engineering student with hands-on experience in data analytics, automation, and system development. Skilled in Python, SQL, and Power BI for building data pipelines, audit analytics, and predictive models. Experienced in transforming raw datasets into actionable insights through cleaning, validation, feature engineering, and reproducible analysis. Strong collaborator with an interest in enterprise data quality, scalable reporting, and applied machine learning.

Work Experience

Junior IT Consultant – Hoda Vasi Chowdhury & Co. (Chartered Accountants)   Remote

- Processed high-volume financial data (100k+ journals, full-year ledgers) for audit planning, trend analysis, and risk assessment across banking and manufacturing clients.
- Built Power Query ingestion workflows and Power BI anomaly-detection views, reducing data preparation time by 40–60% and highlighting <5% high-risk transactions.
- Delivered audit-ready exception summaries that helped audit teams cut manual journal testing by 30–50% and focus on higher-risk areas.

Projects

Automated Audit Sampling Tool (In Progress) (Python, Excel)

- Developing a Python/Excel-based prototype that processes 10k–50k+ transactions and applies monetary thresholds, value-band stratification, and risk-based sampling rules.
- Translating auditor requirements into functional specifications and test cases, validating outputs with 100% traceability to source ledgers.
- Targeting a ~50% reduction in manual sampling time through consistent, repeatable automated selection.

Quantitative ETF Forecasting (Python, Scikit-learn, XGBoost, Statsmodels, TensorFlow)

- Developed ML pipelines to forecast sector ETF performance using regression (Linear, Random Forest), classification (Logistic, Gradient Boosting), and time series models (ARIMA, LSTM) for trading strategy research.
- Automated data collection and feature engineering from Yahoo Finance; built modular scripts for EDA, model training, and backtesting.
- Evaluated predictive signal quality through backtesting and documented a reproducible pipeline as part of a two-person team.

Flight Management System (C++, SQL)

- Designed a relational SQL backend and reporting queries to support operational and analytical use cases.
- Documented data structures and flows to ensure data accuracy and system consistency.
- Generated analytical reports to validate system correctness and operational insights.

Dish Craft – Recipe Application (Flask, Python, Bootstrap, OpenAI API)

- Created a full-stack web application generating personalized recipes with an LLM-based recommendation engine.
- Developed data cleaning and transformation logic to ensure structured API outputs.
- Implemented testing and feedback loops to refine accuracy and user satisfaction metrics.

Education

University of Calgary – Bachelor of Science in Software Engineering   (Expected 2027)

Relevant Coursework: **Data Analytics:** Programming with Data, Probability & Statistics with Machine Learning, Data Science, Engineering Economics **Software & Systems:** Database Systems, Operating Systems, Networked Systems, Object-Oriented Design, Software Architecture **Mathematics & Logic:** Linear Methods, Discrete Mathematics, Algorithms, Applied Machine Learning

Skills

Programming	Python, SQL, C++, C, C#, Java, JavaScript, HTML/CSS, Flask
Data Analytics	SQL, T-SQL, Power BI (DAX, dashboards), Pandas, NumPy, Data Cleaning, Visualization, EDA
Database Tools	SQL Server, MySQL, SQLite, Data Modeling, Query Optimization
Business Tools	Microsoft Excel (Pivot Tables, VLOOKUP), PowerPoint, Power Automate
Machine Learning	Scikit-learn, Feature Engineering, Model Evaluation
Professional	Analytical Reasoning, Problem Solving, Team Collaboration, Communication