

Zain Adhami

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Education

University of Michigan

Masters of Applied Data Science. GPA: 3.9330

Ann Arbor, MI

Jan. 2027

Relevant Coursework: Supervised Learning, Data Mining, Optimization, Information Theory, and Applied Statistics

Experience

Skyway Concessions Co.

Chicago, IL

Sr. Data Analyst/BI Developer

Nov. 2022 – Current

- Engineered **SQL based data pipelines and data models** integrating millions of tolling and transaction records across multiple systems, improving data reliability and reducing reporting latency by **35%**.
- Built **Python (Pandas, NumPy)** workflows to automate data cleaning, validation, and transformation, cutting manual processing time by **~20%** and enabling scalable analytics.
- Designed and maintained **enterprise Power BI dashboards** backed by DAX calculations and Power Query (M) transformations, for revenue, traffic, lane utilization, and payment behavior, driving data informed decisions.
- Developed a **prototype ML forecasting system** using **XGBoost and ARIMA**, combining traffic prediction with elasticity based revenue modeling; improved forecast accuracy by **22%** and provided finance with actionable, model driven pricing insights.

Supernova Technologies

Chicago, IL

Sr. Data Analyst

May 2022 – Nov. 2022

- Partnered with product teams to **validate predictive financial models** through backtesting, scenario generation, and simulation analysis supporting suitability and risk based lending decisions.
- Performed **complex SQL based data analysis and cross system validation** (Oracle, PostgreSQL, MSSQL) to ensure accurate financial inputs and reduce data discrepancies by **~20%**.
- Developed **Power BI dashboards** leveraging SQL, Power Query (M), and DAX to model performance metrics and risk indicators, delivering actionable insights that improved decision making for product and engineering teams.
- Automated data comparison, reconciliation, and transformation workflows using SQL and Python, **strengthening data pipelines feeding analytics and ML driven model evaluation**.

Allvue

Chicago, IL

Data QA Analyst

Aug. 2020 – May 2022

- Designed and authored **20+ Gherkin based test scenarios** to validate data transformations and workflows, improving the reliability of downstream analytics and ML pipelines.
- Conducted **SQL driven data profiling and integrity checks** on large financial datasets, identifying issues that reduced data quality defects by **~15%**.
- Developed and maintained **SOPs and technical documentation** for data validation processes, standardizing workflows and reducing onboarding time by **30%**.
- Partnered with engineers to convert business rules into **testable data requirements**, increasing test coverage by **25%** and supporting higher quality data for modeling tasks.

Projects

NFL Rookie Performance Predictor: Built a regression model using **Python (Scikit-learn, Pandas)** to forecast rookie success from historical NFL and college data; visualized outcomes with **Altair** dashboards.

Strava Data Dashboard: Created an **interactive Altair visualization** analyzing workout performance and GPS paths for optimization insights.

EPA Automotive Trends Analysis: Conducted **EDA** on EPA efficiency data (2010–present) to uncover **fuel economy and CO₂ emission** trends across manufacturers.

Skills & Interests

Technical: Python (Pandas, NumPy, Scikit-learn, Altair), SQL (PostgreSQL, MySQL), R, Power BI, Tableau, Excel (Power Query, PivotTables), Jupyter Notebook, Bash, Git/GitHub, AWS (S3, Athena), Snowflake, dbt, Apache Spark, Gherkin (BDD)

Language: English (Native), Urdu (Conversational), and Spanish (Basic)

Laboratory: Statistical analysis, regression modeling, feature engineering, data cleaning, and visualization pipelines

Interests: Automotive technology, sports analytics, fantasy football modeling, and travel photography