AISHWARIYA ALAGESAN

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EDUCATION

Northeastern University **Boston, MA**
Master of Science in Data Analytics Engineering (GPA – 4.0) Expected May 2025

Anna University **Chennai, IN**
Bachelor of Engineering in Electronics and Communication Engineering Apr 2020

TECHNICAL SKILLS

Programming Languages: Python (Pandas, NumPy, Matplotlib, Scikit-learn, Seaborn, TensorFlow, PyTorch), SQL, R.
Data Analytical Tools: Tableau, Power BI, MS Excel (VLOOKUP, Pivot Tables), Jupyter Notebooks, Google Sheets.
Data Warehousing tools: MySQL, Oracle, SQL Server, MSSQL, BigQuery, ADF, AWS (S3, EC2, Lambda), Snowflake, ETL.
Data Science and ML: Regression, Classification, Decision Trees, SVM, Hypothesis Testing, Clustering, Neural Networks.
Other Tools and OS: Jira, Confluence, Git, Agile, MS PowerPoint, MS Word, Microsoft Office Suite, Windows, Linux.
Certificates: Google Business Intelligence Professional Certificate.

PROFESSIONAL EXPERIENCE

Temenos Pvt Ltd **Chennai, IN**
Product Engineer Jan 2021 – Jul 2023

- Resolved 100+ **critical product defects** in JBase, collaborating with teams, reducing client-reported issues, and improving reliability.
- Developed **Power BI** dashboard, using **DAX** calculations and **KPIs** to analyze transaction data, enhancing data-driven decisions.
- Collaborated with 10+ banking clients to develop tailored **SQL** solutions and **Local APIs**, increasing client satisfaction ratings.
- Conducted financial **analysis** and **testing** on product features, achieving 90% error-free rates, and improving usability.
- Employed **advanced Excel functions** to calculate debit and credit transactions for 500+ savings accounts, ensuring data accuracy.
- Led the development of **financial functionalities** in JBase, resulting in improved product performance and feature adoption.

Cognizant Technology Solutions **Chennai, IN**
Programmer Analyst June 2020 - Oct 2020

- Analyzed 2 years of sales data using **SQL** and **Python** for an India-based hardware company, delivering insights on customer behavior.
- Created interactive **Tableau** dashboards to analyze sales performance across Indian states, facilitating data-driven decision-making.
- Provided stakeholders with insights into market trends and profitability metrics, contributing to a 15% increase in quarterly revenue.

ACADEMIC PROJECTS

Predictive Modeling of CO2 Emissions in the Manufacturing Industry *(Python, Scikit-learn, Pandas, NumPy)* **Boston, MA**
Northeastern University Feb 2024 - Mar 2024

- Applied **machine learning** models (Linear, Lasso, KNN, Random Forest) to predict CO2 emissions with 92% precision.
- Employed **hyperparameter optimization** techniques (Randomized Search, Grid Search) to achieve 97% predictive accuracy.
- Leveraged **scikit-learn** and **pandas** libraries for machine learning tasks, yielding precise CO2 emission predictions.
- Performed Exploratory Data Analysis (**EDA**) on large datasets to uncover data trends, patterns, and relationships for deeper insights.

Real Time ETL Data Pipeline with Weather API using DynamoDB *(AWS, Snowflake)* **Boston, MA**
Northeastern University Jan 2024 - Feb 2024

- Designed a real-time **ETL** data pipeline using DynamoDB, Snowflake, and AWS Lambda, increasing data processing efficiency.
- Integrated weather API data into **DynamoDB**, using **Snowpipe** for real-time data flow to **Snowflake**, reducing data latency by 50%.
- Developed **AWS Lambda** functions for automated data processing and transmission, enhancing processing efficiency by 40%.

Insights into Global Mental Health: Tableau Dashboard Analysis *(Dashboard - Link)* **Boston, MA**
Northeastern University Oct 2023 - Nov 2023

- Developed a **Tableau** dashboard to visualize global mental health trends, including analysis of depression rates and stress factors.
- Employed **calculated** fields in Tableau to derive custom metrics such as depression severity indexes and stress level indicators.
- Implemented **parameters** to allow users to adjust data visualization parameters, enhancing dashboard interactivity dynamically.

Fit-life Hub – Healthcare Database Management System *(MySQL, Python, MongoDB)* **Boston, MA**
Northeastern University Sep 2023 - Oct 2023

- Designed a Fitness Monitoring System with nearly 20 tables using **MySQL**, adhering to relational database principles.
- Executed complex queries using **joins, CTE, rank functions,** and **SQL views**, enhancing query efficiency and execution time by 15%.
- Ensured 90% system scalability through techniques like ER modeling, UML diagrams, and normalization.