Bharath Raavi

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Education

Saint Peter's University — **Sep2023- Feb 2025**
MS in Business Analytics – GPA: 3.89 — Jersey City, New jersey

Skills

Python| SQL| Apache spark| Machine Learning | Deep Learning | TensorFlow | PyTorch | Scikit-learn | Model Deployment | MLOps | Azure Cloud Computing | Databricks (Spark) | Big Data Technologies | Performance Optimization | Data Governance | Data Security | Cross-Team Collaboration | Data Warehousing | Data Integration| Oracle | SQL Server | Informatica | Alteryx | DataStage | Power BI | Tableau | Data Modeling | Business Intelligence |Data Lakes | Data Pipelines | SQL Optimization | Apache Airflow | Reporting & Analytics | Database Design

Professional experience

Project Engineer| Wipro Pvt Ltd | Nov 2020- July 2023

- Developed, tested, and optimized T-SQL code to handle complex analytical problems, improving query performance by 40% and reducing execution time.
- Analyzed and interpreted large datasets using SQL and Python, ensuring 99% data accuracy and consistency across multiple business reports.
- Collaborated with data scientists and business stakeholders to define data requirements, integrating machine learning models into data pipelines for predictive insights.
- Integrated and processed structured and unstructured data from Snowflake, SQL Server, and Oracle, reducing data retrieval time by 30%.
- Designed and maintained scalable data warehousing solutions that supported real-time analytics and AI-driven decision-making.
- Automated ETL workflows using Airflow and Databricks, cutting manual intervention by 60% and improving pipeline efficiency.
- Created interactive dashboards in Power BI and Tableau, incorporating AI-driven insights that helped improve operational efficiency by 25%.
- Implemented machine learning models for forecasting and anomaly detection, leveraging Azure Machine Learning and TensorFlow to enhance data-driven decision-making.

Teaching Assistant-Volunteer | Saint Peter's University | September 2024 - November 2024

- Led sessions to guide students in improving their SQL query skills.
- Provided hands-on support and facilitated lessons, contributing to higher student engagement and improved project outcomes.

Applied Research | Saint Peter's University | November 2024 – February 2025

- Built and optimized XGBoost and Random Forest models for anemia prediction, achieving 92% accuracy on the NHANES dataset with over 5,000 participants.
- Implemented data preprocessing techniques, reducing missing data impact by 15%, and applied feature selection to identify key health indicators.
- Evaluated models using precision (89%), recall (91%), and F1-score (90%), enabling data-driven healthcare insights for early anemia detection.

Independent Projects (Recent)

SMS Spam Detection using Apache Spark

- Developed a machine learning pipeline for SMS spam detection using Apache Spark MLlib, processing a large-scale dataset for accurate classification.
- Optimized Logistic Regression model through cross-validation and hyperparameter tuning, achieving high accuracy and a strong ROC-AUC score.
- Leveraged Apache Spark (PySpark, MLlib) for scalable data processing, improving efficiency in feature engineering and model training.

AI-Powered ETL Code Generator Using GPT-2 and Flask

- Developed a Flask web application that leverages a pre-trained GPT-2 model to generate ETL (Extract, Transform, Load) Python scripts from user-provided descriptions.
- Integrated Hugging Face Transformers and PyTorch, enabling natural language processing to automate ETL code generation with minimal setup. Designed a user-friendly interface for seamless interaction.

Certifications

Microsoft Azure: Certified Azure AI Engineer Associate, Certified Azure Data Engineer Associate
other: SQL(Advanced) , SQL(Intermediate), PWC Power BI Job Simulation, Accenture Data Analytics and Visualization