PAVANA LAKSHMI VENUGOPAL

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PROFESSIONAL SUMMARY

Experienced professional with a strong background in business analysis and data analytics, backed by a master's degree in computer science and engineering. Adept at bridging the gap between technical teams and business stakeholders.

EDUCATION

Master of Science in Computer Science and Engineering (3.73/4 GPA)

February 2024

University at Buffalo, The State University of New York

Bachelor of Engineering in Electronics and Communication (3.6/4 GPA)

June 2013

Visvesvaraya Technological University

TECHNICAL SKILLS

Programming languages: Python, SQL, HTML5, CSS3, JavaScript, C, Spark.

Statistical modelling: Neural networks, Regression, Classification; Tree-based, SVM, Logistic, KNN.

Data Visualization: MS Power BI, Tableau, MS PowerPoint, MS Excel, Alteryx.

Database tools: PostgreSQL, Redshift, MySQL Workbench.

Other familiar tools:
Snowflake, A/B Testing, Hadoop, Apache Spark, Google Analytics, PowerApps, Git.

• Technical Expertise: Version Control Systems, Data Modeling, Data Visualization, Data Ingestion and Extraction.

WORK EXPERIENCE

AppMandi LLC | Data Engineer Intern

June 2023 - Aug 2023

- Streamlined data extraction, transformation, and loading processes (ETL) using Python scripts, reducing overall processing time by **50%** and increased the model efficiency by **40%**.
- Developed interactive dashboards in PowerBI to visualize complex data sets, resulting in a **40%** increase in data accessibility and understanding for stakeholders.
- Developed a user-friendly app using PowerApps, integrating AI/ML technology to enhance the user experience.

Cerner Corporation

Team Lead | Senior Test Automation Engineer

Apr 2017 - Jan 2021

- Managed and coordinated release activities for 3 teams, ensuring timely delivery of all project deliverables.
- Developed and executed comprehensive automated test cases to support software enhancements, resulting in a **95%** reduction in manual effort and saving over 500 hours of testing time annually.
- Created interactive dashboards using **Tableau** to visualize key metrics, enabling leadership to make informed decisions.

Data Analyst

Dec 2013 - Mar 2017

- Collaborated with data engineering team to collect, normalize, structure and aggregate data from various sources, to facilitate creation of database tables, wrote custom **SQL** tables and views per client request.
- Audited data sets for validity, completeness and performed exploratory data analysis using Python panda's library.
- Leveraged **MS Power BI** to examine healthcare data to identify low-margin services and provided recommendations leading to 20% increase revenue realizations.

PROJECT EXPERIENCE

Predictive Analytics:

Python, KNN, Linear & Logistic Regression, Decision Tree, Neural networks

- Developed and trained predictive models using advanced machine learning algorithms such as random forests, gradient boosting, and neural networks to analyze large datasets.
- Implemented feature engineering techniques such as PCA to optimize model performance and reduce dimensionality.

Big Data using MapReduce & Spark:

Java, Python, Hadoop, MapReduce, PySpark

- Developed and executed a scalable data ingestion pipeline using MapReduce and PySpark, resulting in a 50% reduction in processing time for large text datasets.
- Implemented algorithms to analyze and extract meaningful insights from massive text datasets.

Property Tax Analysis in West Roxbury:

Python, Streamlit, Random Forest, Gradient Boosting

- Created end-to-end data science pipeline, including EDA, data cleaning, model building, and predictions.
- Trained models such as Multiple Linear Regression, Decision Tree, Random Forest Regressor, Support Vector Regression, KNN and Gradient Boosting Regression.

Hospital Information System:

Python, SQL, Database design, PostgreSQL, Flask, HTML, CSS

• Developed and implemented a dynamic website that seamlessly integrates with our database, enhancing user experience by providing real-time query visualization and results display.