PAVANA LAKSHMI VENUGOPAL
pavanala@buffalo.edu | 518-986-0730 | linkedin.com/in/pavanavenugopal | github.com/datawhiz02

EDUCATION

Master of Computer Science and Engineering (3.7/4 GPA) Expected December 2023
University at Buffalo, The State University of New York
Relevant Coursework: Pattern Recognition, Analysis of Algorithms, Predictive Analytics, Modern Networking Concepts, Data Intensive Computing, Machine Learning, Data Models & Query Language, Deep Learning on Graphs

Bachelor of Engineering in Electronics and Communication (3.6/4 GPA) June 2013
Visvesvaraya Technological University

KEY SKILLS

Languages: C, SQL, Python, Spark
Tools: RQM, JIRA, Crucible, Touchstone, Eggplant, Tableau, PowerBI, PostgreSQL, Pytorch, TensorFlow, Microsoft Azure, Git, Linux, Spark, Pandas, Scikit, PowerApps.
Experience in Version Control Systems, Knowledge on Data modeling, Data visualization, Data Ingestion and Extraction.
Outstanding communication / interpersonal skills & ability to work under tight schedules.

WORK EXPERIENCE

APPMANDI LLC, Chicago, Illinois June 2023 – August 2023
Data Engineer Intern

- Streamlined data extraction, transformation, and loading processes (ETL) using Python scripts, reducing overall processing time by 50%.
- 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 and increase efficiency by 40%.

Cerner Healthcare Solutions India Pvt ltd, Bengaluru, Karnataka December 2013 - January 2021
Team Lead| Senior Test Automation Engineer

- 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.

ACADEMIC EXPERIENCE

Credit Card Fraud Detection Models: Python, Random Forest Classifier, XG Boost, TensorFlow

- Worked with the Vesta credit dataset, a dataset of 1,097,231 rows and 434 columns, to develop machine learning models.
- Collaborating with HiddenLayer, an AI Application Security company, to test their MLDR system on machine learning models and AML attacks.

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 and variable selection to optimize model performance and reduce dimensionality of datasets by an average of 60%.

Machine Learning: Python, Keras, TensorFlow, Convolutional Neural network, Image Classification, NLP

- Built several ML models such as Bayes Decision, Logistic Regression, multi-class SVM using TensorFlow.
- Hands-on experience with machine learning frameworks such as TensorFlow.

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.
- Developed web-based UI for interactive data analysis and model deployment.

Hospital Information System: Python, SQL, Database design, PostgreSQL

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

Naive Bayes Classifier Implementation: Python, Probability, Naïve Bayes Algorithm, Algebra, Pandas

- Implemented a Naïve Bayes classifier from scratch using Python and NumPy libraries, resulting in a good accuracy rate.