Sandhya Kilari

+1 (517) 580-2675 East Lansing, MI kilarisa@msu.edu

Education

Michigan State University East Lansing, MI
Master of Science in Data Science; GPA: 4.0 *August 2023 – April 2025*
Courses: AI Computation Foundations, Data Mining, Statistical Modeling, Big Data Analysis

Siddaganga Institute of Technology Tumakuru, India
Bachelors in Electronics and Communication Engineering; GPA: 3.62 (8.84/10.0) *July 2016 – May 2020*

Experience

Henry Ford Health + Michigan State University Health Sciences East Lansing, MI
Student Research Assistant III *May 2024 – Present*

- Leveraged patient-reported outcomes to predict health utilization in cancer patients. Cleaned and preprocessed data to ensure quality and accuracy. Analyzed and handled missing data to maintain dataset integrity.
- Trained and evaluated machine learning models for risk prediction. Utilized Python, R, Pandas, NumPy, Seaborn, Matplotlib, and Scikit-learn for data analysis and visualization.

Accenture Solutions Pvt. Ltd Bengaluru, India
Analyst *Nov. 2020 – July 2023*

- Led data integration initiatives, managing migrations and system upgrades with SQL Server, .NET Core MVC, and Azure DevOps to enhance application performance.
- Developed analytics solutions for monitoring and reporting program performance using Dynamics 365 CRM, supporting data-driven decision-making for a Microsoft client.
- Applied machine learning techniques to propose predictive models that improve application functionalities, increasing user engagement and operational efficiency.

Apsis Solutions Tumakuru, India
Intern *Summer 2018*

- Leveraged training in embedded systems to extract and preprocess data from diverse processors and microcontrollers like PIC 18 and ARM 7, facilitating data-driven insights for PCB manufacturing processes.
- Developed Internet of Things (IoT) solutions to enable real-time data collection and exchange between production equipment and analytical platforms, enhancing operational efficiency and predictive maintenance strategies.
- Designed and implemented an Android application using MIT App Inventor, enabling user interaction and data visualization, thereby improving stakeholder communication and decision-making based on real-time data analytics.

Projects

- **Heart Disease Assessment:** Engineered a predictive model using Python and machine learning to evaluate heart disease risk, targeting early intervention and cost reduction.
- **Sentiment Analysis:** Crafted a sophisticated sentiment analysis system using Python and Flask to autonomously analyze and categorize customer reviews.
- **Bike Rental Prediction Analysis**: Analyzed a bike rental dataset to train regression models for predicting the number of bikes rented in a given time period based on weather and other temporal information.
- **Predicting Credit Default:** Developed and refined predictive models to forecast credit risks, significantly boosting credit risk management.
- **Graph-Based Node Classification:** Designed and enhanced a Graph Convolutional Network using PyTorch and Bayesian hyperparameter tuning to improve node classification accuracy.

Technical Skills

- **Languages:** Python, R, C, C++, ASP.NET MVC, C#, JavaScript, CSS, SQL, HTML, Java, Data Structure and Algorithm, NoSQL, Embedded C.
- **Tools and Technologies:** Azure, Visual Studio IDE & Code, Microsoft Cloud Azure, R-Studio, Jupyter Notebook, SQL Server, MongoDB, MATLAB, Power BI, Altair, Matplotlib, NumPy, Seaborn, Scikit-learn, Pandas, PyTorch, Streamlit, Flask.
- **Areas of Expertise**: Machine Learning, Data Visualization, Data Collection & Analysis, Data Manipulation, Predictive Modeling.