#### SAHANA GIRISH

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#### **EDUCATION**

University of Illinois Urbana-Champaign

Master of Science in Information Management (MSIM)

August 2023 - May 2025

4.00/4.00 GPA

Visvesvarava Technological University

Bachelor of Engineering in Electronics and Communication Engineering (ECE)

August 2017 - July 2021 3.64/4.00 GPA

#### **SKILLS**

Languages: Python, SQL, R, MATLAB

Libraries: Flask, Pandas, TensorFlow, Scikit-Learn, PyTorch, Keras, OpenCV, Requests, NumPy, Matplotlib, SciPy, Seaborn Technologies: AWS (SageMaker, Lambda, Data Lake, ECR), Azure (Data Factory, Databricks, Stream Analytics), MLflow Others: GitLab, Docker, Tableau, Power BI, Jupyter, Spark, Snowflake, PyCharm, Linux, Statistics, Agile, Jira, MS Suite

### WORK EXPERIENCE

### Data Science Intern, Werfen – R&D

August 2024 - Present

- Applied statistical curve fitting techniques to digitize the instrument time series data to aid product feature development
- Formulated a robust assay flagging strategy to handle the reported false positives thereby reducing it by 96%
- Partnered with product managers in analyzing sales trends, UX and correlations, facilitating data-informed decisions
- Delivered customized datasets, extracted new features and optimized the existing pipeline through complex SQL queries leading to 62.85% faster runtime while adhering to GMP for quality, traceability, and regulatory compliance

# Data Science Intern, OSF Healthcare – Advanced Analytics

May 2024 – August 2024

- Forecasted cardiac abnormalities by implementing a dual-detector LSTM and CNN time series models with 88% accuracy
- Designed insightful dashboards and assessed operational KPIs using statistical process control to support the mergers & acquisitions team in due diligence and market strategy analysis thereby enabling real-time monitoring of process variation
- Employed A/B testing and control group analysis to identify operational strategies and reduced potential risks by 20%
- Collaborated with cross functional teams in sprint planning workshops to develop efficient project roadmap flowcharts

## Senior Data Scientist, Comviva Technologies

**September 2021 – July 2023** 

- Led the design, development, containerization, AWS SaaS deployment of an automated AI/ML product Mobilytix AIx
- Expanded Mobilytix AIx by incorporating REST API, model performance visualization tools and deep learning modules
- Streamlined the cleaning and processing of large datasets to construct demand forecasting machine learning models, yielding an 8% to 10% reduction in customer churn
- Accelerated SDLC by implementing sprint iterations, CRM skills for SaaS to improve Product Life Cycle velocity by 60%
- Supervised new joiners in meticulously extracting, transforming and loading big data by using Apache NiFi and Spark

# Machine Learning Intern, Compsoft Technologies

**July 2021 – September 2021** 

- Performed market analytics and sentiment analysis on social media comments using NBSVM, achieving 84% accuracy
- Augmented accuracy to 86.7% through NLP enhancements such as text cleaning, stemming, and tf-idf techniques
- Designed data pipelines with AWS S3 and Glue, optimized SQL scripts to enable efficient ETL processes and data storage
- Optimized interactive Power BI dashboards through query folding and data modeling for presenting performance metrics

## **PROJECTS**

## Business consultancy for a motion capture company to enter the retail domain

**April 2024** 

- Provided a data-informed B2B strategy to enter the US retail market with in-store analytics, BI and warehouse management system use cases by carrying out detailed market research, product and data analysis, and visualizations
- Performed cohort analysis to examine customer lifetime value and shopping behaviors, providing actionable recommendations for targeted marketing efforts, supply chain optimization and customer retention plans

#### Diabetes Prediction using Machine Learning Classifiers: Random Forest, Naïve Bayes & XGBoost January 2022

- Processed the Pima dataset using 5-fold cross validation and maximized the metrics through hyper parameter tuning
- XGBoost outperformed Naïve Bayes with a sensitivity, specificity and AUC of 81.2%, 94.5% and 2.02% respectively

# Customer Segmentation and Next Best Offer Recommendation on Bank Marketing Dataset

- Segmented high-value customers by K-Means clustering and RFM analysis for marketing strategies to improve retention
- Built predictive models to determine the propensity score of customers accepting offers and achieved a recall of 86.1%