SANJANAA SRIDHAR

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EDUCATION

UNIVERSITY OF ILLINOIS URBANA CHAMPAIGN Aug 2023 - Present
Master of Science, Information Management ***GPA: 4.0/4.0***
- Coursework : Database Admin & Scaling, Statistical Models, Data warehousing, Business Intelligence, Info Modeling, Methods of Data Science, Machine Learning Cloud, Adv. Business Research, Data Storytelling

SRM INSTITUTE OF SCIENCE AND TECHNOLOGY June 2019 - May 2023
Bachelor of Technology, Electronics and Communication Engineering ***GPA: 4.0/4.0***

EXPERIENCE

EDUCATION JUSTICE PROJECT **Champaign, IL**
Data Analyst *March 2024 - Present*
- Performed **Tableau dashboarding** to analyze order request and fulfilment, donation impact, funds allocation and social media trends and reduced data processing time by 30% through optimized **database design**.
- Improved budget planning accuracy by 25% through automating the grant allocation system, implementing **SQL queries** and **time-series forecasting** with Python.

BEST EGG, INC. **Wilmington, DE**
Data Science Intern *May 2024 - Aug 2024*
- Engineered 15 real-time financial risk calculators using **AWS Lambda** and **DynamoDB**, enabling automated fraud detection in loan verification pipeline. Optimized **CI/CD** pipeline with automated testing framework, achieving 100% pass rate across 200+ **Pytest** cases for enhanced code reliability.
- Reduced loan risk assessment time by 35% through implementation of extensive **Snowflake** data testing and **Octopus** deployment automation.

CENTER FOR INNOVATION IN TEACHING AND LEARNING **Champaign, IL**
Statistical Analyst and BI Developer *Feb 2024 - Apr 2024*
- Analyzed survey data from 2,000 respondents using **R and SPSS**, applying statistical methods for insights, while implementing **Python** scripts to refine **HTML reports** and automated data exports to Tableau for seamless analysis.
- Created **Tableau dashboards** for dynamic visualizations and streamlined survey reporting generation with **R-Markdown**, enabling deans and stakeholders to assess campus climate and DEI initiatives.

HEWLETT PACKARD & NATIONAL UNIVERSITY OF SINGAPORE **Singapore**
Data Science Researcher *Dec 2022 - Jan 2023*
- Achieved 91% accuracy in sign language detection by implementing a **CNN** model with optimized dataset preprocessing, enabling robust performance across varied lighting and hand positions.
- Deployed a scalable web application on **Azure VM**, integrating a **Flask**-based **REST API** for model inference and a **React** front-end for real-time interaction, reducing response latency by 30% and enhancing user experience.

FLSMIDTH PRIVATE LIMITED **Chennai, India**
Automation Data Science Intern *May 2022 - July 2022*
- Integrated a **PLC** system with **SCADA**-based data acquisition, enabling real-time monitoring and analysis of cement plant operations. Processed high-frequency sensor data using **Databricks** for performance insights.
- Achieved a secure **data pipeline** using **Python, SQL, and Git**, containerized with **Docker**, to transmit real-time asset performance data to the **SiteConnect app**, enhancing remote monitoring for clients.

RESEARCH PROJECTS

PULMONARY EMBOLISM RISK MODELING | The Mayo Clinic *Dec 2023 - Apr 2024*
- Developed a decision support framework for The Mayo Clinic using **Bayesian Additive Regression Trees** (bartMachine) in R to optimize treatment strategies for pulmonary embolism, focusing on mid-sized clots.
- Created **R scripts** to analyze echocardiography data and quantify RV strain under Dr. Ian Brooks' guidance; findings identified 3 novel biomarkers now used in ongoing clinical trials.

A NOVEL APPROACH TOWARDS NEWS CATEGORY PREDICTION USING NLP *Aug 2022 - Oct 2022*
- Implemented advanced **NLP** techniques to develop a news category prediction model, using a dataset from BBC across five categories. Presented findings at the 2022 International Conference on Edge Computing and Applications.
- Employed machine learning algorithms, including **Naïve Bayes, Random Forest, K-Nearest Neighbors, and Support Vector Machine,** achieving a **94%** accuracy with SVM showing superior performance.

TECHNICAL SKILLS

Languages and Cloud: Python(NumPy, Keras, Matplotlib, Scikit-Learn, Seaborn), SQL, NoSQL, R, Microsoft Azure, AWS
BI tools: PowerBI, Tableau, Snowflake, SPSS, R Markdown, MS Excel, MS PowerPoint, Talend, JIRA, KNIME
Data Science: Data Cleaning, Data Visualization, Data Modelling, Machine Learning, Exploratory Data Analysis (EDA), Statistical Analysis, Predictive Analysis, Feature Engineering, Pattern Recognition, ETL pipelines, A/B testing, Git