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, Info Consulting, 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*

WORK EXPERIENCE

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

BUSINESS INTELLIGENCE GROUP   **Champaign, IL**
Data Consultant   *Aug 2024 - Dec 2024*
-   Engineered a production-level **sales forecasting model** for a Korean food distribution company using 5M+ **Snowflake records**, achieving 94% accuracy; Designed a 4NF schema to support scalable forecasting, and optimize BI integration.
-   Conducted **time series EDA** and external factor analysis (CPI, gas prices, holidays, exchange rates), then developed a hybrid **SARIMAX + XGBoost sales forecasting model** capturing both trend-seasonality and nonlinear residuals; visualized insights and forecast outputs through interactive **Power BI dashboards**.

BEST EGG, INC.   **Wilmington, DE**
Software Engineer Intern - Data   *May 2024 - Aug 2024*
-   Developed a fraud detection service to identify inconsistencies in loan applications by analyzing linked bank account data; built a **Python**-based **AWS Lambda** (**FastAPI**) triggered via **API Gateway** to compute risk signals such as unemployment deposit flags, average daily balance, 90-day opening balance, and transaction frequency.
-   Published computed scores to **Snowflake** (**PostgreSQL** interface), enabling querying of enriched applicant data; ensured code reliability with **Pytests** and streamlined deployments via **CI/CD** automation.

CENTER FOR INNOVATION IN TEACHING AND LEARNING   **Champaign, IL**
Statistical BI Developer   *Jan 2024 - Mar 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 ENTERPRISE & NATIONAL UNIVERSITY OF SINGAPORE   **Singapore**
Data Science Research Intern   *Dec 2022 - Jan 2023*
-   Trained a **CNN** for sign language detection (91% accuracy) under varied lighting & hand positions using augmentation.
-   Deployed a **Flask-React** web app on **Azure VM** for real-time model inference, reducing latency by 30%.

FLSMIDTH PRIVATE LIMITED   **Chennai, India**
Automation Data Science Intern   *May 2022 - July 2022*
-   Built **PLC-SCADA** integration & analyzed high-frequency sensor data in **Databricks** for real-time plant monitoring.
-   Designed a **Python-SQL** pipeline to stream real-time asset data to app (SiteConnect), enabling remote client monitoring.

RESEARCH PROJECTS

PERFORMANCE & SCALABILITY BENCHMARKING OF APACHE CASSANDRA   *Aug 2022 - Oct 2022*
-   Evaluated scalability and fault tolerance of **Cassandra** by deploying a 3-node Cassandra cluster on **AWS EC2** with custom cassandra.yaml, VPC peering, and seed node config; verified setup via nodetool.
-   Ingested **Kafka**-based real-time weather data stream; used cassandra-stress to simulate workloads and test fault tolerance by disabling nodes. Implemented RBAC and **automated backups** via cron to ensure security and reliability.

A NOVEL APPROACH TOWARDS NEWS CATEGORY PREDICTION USING NLP ^   *Aug 2022 - Oct 2022*
-   Achieved 94% accuracy on BBC news classification using SVM; Benchmarked six supervised models for multi-class classification and presented findings at the 2022 Intl. Conf. on Edge Computing & Applications.

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, Kafka
Data Science: Data Cleaning, Data Visualization, Data Modelling, Machine Learning, Exploratory Data Analysis, LLM, Statistical Analysis, Predictive Analysis, Feature Engineering, Pattern Recognition, ETL pipelines, A/B testing, Git