DEV KARAN SURESH

Hebbal, Bengaluru, Karnataka

Education

University of Maryland

Aug 2023 – May 2025

M.Sc. Data Science (GPA: 3.91/4.0)

Maryland, USA

SRM Institute of Science and Technology

Jun 2019 - Jun 2023

B. Tech Computer Science and Business Systems (GPA: 9.78/10)

Tamil Nadu, India

Experience

Navy Federal Credit Union

May 2024 - Aug 2024

Data Scientist intern

Virginia, USA

- Queried and processed large-scale distributed datasets (13M members) using SQL and PySpark on Databricks, improving efficiency 4× over baseline.
- Built and optimized a Random Forest prediction pipeline, reducing transaction costs by 72% and saving \$30M projected over 5 years.
- Partnered with cross-functional Strategy and Risk teams to design scalable data solutions supporting new product launches.

HighRadius Jan 2022 – Apr 2022

Fullstack Developer Intern

Remote

- Developed an AI-powered fintech platform with React (frontend) and JDBC (backend), enabling seamless invoice management for B2B clients.
- Designed and deployed an XGBoost forecasting model for invoice close dates, improving financial predictions and decision-making speed.

University of Maryland

Jan 2024 - May 2025

Student Assistant

Maryland, USA

- Applied Python and Excel (pivot tables, data cleaning) to analyze departmental data, uncover usage trends, and improve reporting accuracy.
- Built Tableau dashboards to communicate insights effectively to both technical and non-technical teams.
- Performed data validation and record management, ensuring integrity across systems and supporting efficient scheduling and resource allocation.

Projects

Intelligent Fraud Detection (Cloud-Deployed)

- Engineered and cleaned over 650K URL records and 37K Twitter profiles, resolving encoding issues and managing imports into Amazon RDS.
- Developed ML pipelines to detect Twitter bots (Random Forest) and malicious URLs (CharCNN), achieving 0.97 & 0.85
 F1-scores respectively.
- Deployed both models as Flask APIs on AWS EC2, integrated with Amazon RDS and monitored performance via CloudWatch.

FastAPI Social Media API

- Built and deployed a REST API (FastAPI + PostgreSQL + Docker) supporting auth, CRUD operations, and voting functionality across 4 endpoints.
- Implemented CI/CD with GitHub Actions, automated testing (pytest), and containerized multi-platform deployment.
- Optimized database migrations with Alembic, ensuring reliability in a distributed environment.

RAG Model for Food Bank

- Built a retrieval-augmented generation pipeline using ChromaDB + Gemini API, enabling accurate content creation.
- Engineered prompt templates, retrieval logic, and LLM fine-tuning for improved context relevance and output quality.

Technical Skills

- Programming: Python, C++, SQL, PySpark, HTML, CSS, Javascript
- Tools and Technology: PowerBI, Databricks, Git, Github, Streamlit, AWS, Docker, ZeroMQ, Alembic, FastAPI, Palantir Foundry