ROHITH SRINIVASA

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EDUCATION

Arizona State University, Tempe **Aug 2024 – May 2026**
Master of Science in Data Science Analytics and Engineering (Computation and Decision Analytics)

Don Bosco Institute of Technology, India **Aug 2018 – May 2022**
Bachelor of Engineering in Computer Science.

TECHNICAL SKILLS

Languages & DBs: Python, SQL, JavaScript, Bash, Java, C++, PostgreSQL, MongoDB, Redis
ML & Data Tools: Scikit-learn, TensorFlow, Keras, Hugging Face, XGBoost, Spark, Airflow, MLflow, PowerBI
DevOps & Cloud: Docker, FastAPI, Kubernetes, Terraform, NGINX, Azure AKS, AWS, GCP

WORK EXPERIENCE

IoT & AI Consultant — Software AG **Aug 2022 – Jul 2024**

- Designed and launched predictive maintenance models for IoT sensor data using time-series analysis, improving equipment failure detection by 22% across client operations.
- **Led** the integration of Cumulocity DataHub with **Telstra**, facilitating secure **data ingestion from Azure Data Lake** to Power BI and improving reporting turnaround by **35%**.
- **Architected** and operationalized real-time **anomaly detection** and automated alerting systems for the **Abu Dhabi Department of Municipalities and Transport**, enabling actionable insights from over **50K+ IoT events/day**.
- **Streamlined** onboarding flows by delivering robust **webMethods iPaaS** solutions for a large-scale telecom client, reducing integration effort by **~40%**.
- **Co-designed** a GenAI-based assistant using **LLaMA-2 7B** + **FAISS** for document-level Q&A over RCA reports and SOPs, cutting internal support response time by **~50%**; received executive recognition.
- Containerized and orchestrated over **15 RESTful microservices** using **FastAPI** and released to **Azure AKS**, reducing response latency by **40%** and enabling auto-scaling for **10K+ enterprise client requests/day**.
- **Awarded Software AG Spot Award (Jan 2024)** for leading the **successful rollout of Cumulocity IoT integration** for **2 major clients (DMT & Enercon)** and co-developing the **MaSe GenAI chatbot**, projected to reduce internal ticket load by **50%+**.

ML Research Assistant — Arizona State University **Nov 2024 – Present**

- Developed a Random Forest-based phishing website classifier with 92% accuracy.
- Engineered a production-ready deployment stack using **FastAPI, Docker, Azure VM**, and **NGINX**, enabling **real-time model inference** with avg. response times under **200ms**.
- Delivered a lightweight **Vue.js-based frontend** connected to REST APIs, enabling **real-time phishing classification UI** with support for **100+ concurrent user queries**.
- Benchmarked multiple models including Logistic Regression, SVM, and XGBoost against Random Forest, achieving a 15% higher F1-score using RF on imbalanced phishing datasets

PROJECTS

LLM Based Scam Detection using Llama-3
Technologies: LLaMA-3-8B, LoRA, PyTorch, AWS EC2, Docker, NGINX, MongoDB, Selenium

- Fine-tuned LLaMA-3-8B using LoRA on 18,000+ phishing site samples for text classification; achieved **98.85% accuracy** on real-world detection tasks.
- Engineered a scalable, real-time **inference pipeline** integrating **Selenium web scraping**, **MongoDB storage**, and **containerized microservices** on **AWS EC2**.
- Operationalized containerized inference services using Docker and NGINX, handling over **15K daily requests** with **sub-250ms latency** in high-throughput environments.

Cold-Start Movie Recommender using LLM Embeddings
Technologies: OpenAI Embeddings, Scikit-learn, FastAPI, React.js, Cosine Similarity

- Engineered a hybrid recommender system using OpenAI embeddings and collaborative filtering, improving cold-start user coverage by **45%** and boosting **Precision@10 to 88%** on MovieLens-100K.
- Achieved **88% Precision@10** on the MovieLens 100k dataset; optimized using **cosine similarity re-ranking**.
- Deployed the model as a REST API using FastAPI and integrated a React.js frontend, achieving **95% UI responsiveness under 300ms** and supporting **100+ concurrent users.**

MLOps Pipeline for Bike Demand Forecasting
Technologies: Azure AKS, MLflow, Apache Spark, XGBoost, Terraform, Prometheus, Grafana

- Implemented a full MLOps pipeline with Spark + XGBoost, integrated with MLflow, and provisioned CI/CD infra via Terraform on Azure AKS.
- Improved forecast accuracy by **18%** through weekly retraining and drift-based model updates.

RELEVANT COURSEWORK AND TRAINING

- Certifications & Workshops: Azure AI Fundamentals (AI-900), Google Data Analytics, HuggingFace Transformers, Advanced ML (ASU), NLP with BERT.
- Completed Databricks Partner Accreditation: Data Engineering & ML Foundations – focused on scalable pipelines, Delta Lake, and ML deployment in production.