Aneesh Mussim

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Technical Skills / Certifications

Languages: Python, C#, Java, JavaScript/TypeScript, SQL, PowerShell, Node.js, C, C++
AI / ML / GenAI: Frontier & Open-Weight LLMs (LLaMA-family, Mistral), Prompt Engineering, RAG, Context Grounding, Embeddings, Semantic Search, Regression, Time-Series Forecasting, Anomaly Detection
Frameworks / Systems: Flask, React, Angular, .NET, TensorFlow, scikit-learn, FAISS, Ollama, LangChain-style Workflows, REST APIs
Cloud / DevOps: AWS (Lambda, Kinesis, S3, RDS), Docker, CI/CD, Linux, Git, GitHub
Certifications: AWS Certified AI Practitioner (2025), Google Analytics (2025), HackerRank Software Developer (2025), HackerRank SQL (2025)

Experience

AI/ML Engineer — Insicloud Jan 2025 – Present
Remote • Chantilly, VA
- Developed a monitoring system integrating AI-based image recognition models and sound models for real-time anomaly updates. Improved event detection by **30%** using Python, TensorFlow, and OpenCV.
- Trained and validated a Kaggle sound classification dataset and reached **90%** model accuracy in Python using TensorFlow and scikit-learn for feature extraction and to optimize the model.

Web Application Intern — VCU College of Engineering Aug 2023 – Dec 2024
Richmond, VA
- Developed a real-time **VCU Bus Transit web application** that processed that processed over **1200 route lookups per day**, improving transit accessibility for students using React, Flask, and SQL database for data persistence
- Optimized backend performance by refining RESTful API endpoints in **Flask**, reducing data response latency by **30%** and improving real-time synchronization with the React frontend.

Machine Learning Researcher (Capstone) — Capital One Nov 2022 – Apr 2023
Richmond, VA
- Developed fraud telemetry pipelines using AWS Lambda, Kinesis, and Datadog, while improving visibility for unusual transaction patterns by **40%** and enabling faster fraud detection.
- Applied training of scikit-learn anomaly detection models using synthetic threat simulations to improve precision and recall for fraud detection in streaming data.

Software Development Intern — Bank of America Jun 2021 – Oct 2022
Richmond, VA
- Designed and developed features for a literacy platform on mobile using React Native, Flask, and SQLite to allow real-time dashboards, thereby improving student progress tracking.
- Partnered with the UI/UX design team using **Figma** to translate high-fidelity mockups into responsive React components.

Projects

EchoSentinel — Gunshot Detection Agent 2025
Python • TensorFlow • Streamlit • IoT
- Extended a prototype for an ML model utilizing TensorFlow to filter gunshots out of background noise. This combined data from IoT devices and cameras to achieve a **35%** cut in instances of false positives.

Post-Quantum Cryptography Scanner 2025
Flask • Python • PowerShell
- Developed Flask microservices to audit SSL/TLS configurations and automate key-store management with the help of PowerShell. These security checks led to the migration of enterprises to quantum-safe encryption.

LegalAI — Document Intelligence Agent (Dean's Research Fund Awardee) 2025
React • Flask • Ollama • FAISS
- Designed and implemented a document intelligence system using frontier open-weight LLMs via Ollama, applying structured prompt engineering, retrieval-augmented generation (RAG), and context grounding to extract, summarize, and answer questions over legal documents with high accuracy and low hallucination rates.

Smart Bottle Service — Dynamic Pricing and Demand Forecasting Platform 2025
Angular • Flask • Python • Machine Learning • SQL
- Built a dynamic pricing platform combining traditional regression-based demand forecasting with prompt-engineered frontier LLMs to contextualize pricing recommendations using event signals, venue metadata, and historical sales, enabling explainable, operator-friendly revenue optimization.

Fitness Tracker Web App 2024
ASP.NET MVC • C# • Entity Framework • SQL Server • HTML/CSS • IIS
- Developed a full-stack ASP.NET MVC web application to track user fitness metrics including workouts, exercise logs, and progress history using C# and MVC architecture.

Education

B.S. Computer Science, Virginia Commonwealth University — Dec 2025