Amaan Mohamed Kalemullah

☑ amaanmohamed55@gmail.com 📞 +1 480-690-0972 in amaan-mohamed 🗘 amaan-1234 🖣 Tempe, Arizona

Experience

Machine Learning Intern

Jul 2023 - Oct 2023

NeuralHire, Wylie, TX

- Built and optimized a real-time face detection model (HaarCascade) for tracking off-screen movements, improving responsiveness in behavioral analysis and multimedia datasets.
- Integrated models into research pipelines and maintained 10+ production scripts for video/speech processing with OpenCV and Praat, ensuring scalability and reliability.

ReactJS Development Intern

Jun 2022 - Jul 2022

VIT, Chennai, India

- Developed dynamic, reusable ReactJS components, including responsive tables with configurable rows/columns, and supported backend integration via APIs.
- Improved UI stability by refining features, testing, and bug fixes, while contributing in Agile workflows through code reviews and team discussions.

Education

Arizona State University, Tempe, AZ

Aug 2024 - May 2026

MS Data Science, Analytics and Engineering

Coursework: Statistics for Data Analysts, Data Processing at Scale, Data Mining, Statistical Machine Learning,
Data Visualization, Data-Driven Decision Making CGPA: 3.72/4.00

Vellore Institute of Technology, Chennai, India

Aug 2020 - May 2024

B. Tech Computer Science and Engineering

• Coursework: Design and Analysis of Algorithms, Deep Learning: Principles and Practices, Speech and Language Processing using Deep Learning, Discrete Mathematics and Graph Theory

Skills

Languages and Database: Python, Java, SQL, MongoDB, ReactJS, NodeJS

Data Analysis & Visualization: Tableau, R, Power BI, Matplotlib

Concepts: Machine Learning, NLP, Computer Vision, Deep Learning (CNN, RNN, Transformers), DevOps, MLOps, Data Analysis, Statistical Modeling, Model Evaluation Metrics

Soft Skills: Time Management, Research collaboration, Adaptability, Communication skills, Critical Thinking Certifications: IBM Artificial Intelligence Analyst (May 2023)

Projects

Online Smart Search

Jun 2025 - Jul 2025

 $Python,\ Serp API,\ Hugging Face,\ Semantic\ Kernel$

- Built an AI-powered product search and summarization tool using SerpAPI, HuggingFace (DistilBART), and Semantic Kernel for live Google Search retrieval.
- Implemented modular Python functions for product filtering, summarization, and fallback handling to ensure robustness and reusability.

Retrieval-Augmented Chatbot

 $Jun\ 2025\ -\ Jul\ 2025$

Python, Streamlit, FastAPI, Groq AI, LangChain

- Developed a RAG chatbot supporting document uploads (PDF, TXT, MD) and context-aware Q&A.
- Integrated ChromaDB vector search and LangChain-based processing for accurate real-time retrieval.

Recipe Sharing App

Jun 2025 - Jul 2025

MongoDB, Express.js, React, Node.js

- Developed a full-stack MERN application enabling users to add, browse, edit, and delete recipes with responsive UI and smooth client-side routing.
- Designed and integrated a RESTful Express API with MongoDB, secured via environment configs, and deployed the frontend on Vercel.

Publication

C = Conference

[C.1] Kalemullah, Amaan Mohamed. "Deepfake Classification for Human Faces." Proceedings of the 7th International Conference on Circuit Power and Computing Technologies (ICCPCT 2024), IEEE, May 2024. doi: 10.1109/ICCPCT61902.2024.10672973 ☑