

Alan Subhash

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PROFESSIONAL SUMMARY

Artificial Intelligence and Data Science undergraduate specialising in machine learning, predictive analytics, data engineering, and AI-driven system design. Experienced in building scalable ML pipelines, optimising real-time intelligent systems, and deploying cloud-based analytics solutions. Strong expertise in Python, SQL, ETL workflows, and model evaluation techniques.

EDUCATION

Muthoot Institute of Technology and Science (MITS), Kochi September 2022 – May 2026 (Expected)
– B.Tech in Artificial Intelligence and Data Science

EXPERIENCE

AeroBot X: Autonomous Air Quality Monitoring System | Robotics, AI January 2025 – March 2025
– Engineered an AI-powered autonomous air quality monitoring robot integrating multi-sensor data acquisition and HEPA-based purification.
– Improved navigation efficiency by 20% through optimised path-planning and real-time obstacle detection algorithms.
– Reduced pollutant detection latency by 30% using sensor fusion and signal processing techniques.

PROJECTS

F1Track.AI: Performance Analytics Platform | ML, Data Analytics July 2025 – December 2025
– Architected an AI-driven analytics platform for processing large-scale Formula 1 datasets, including lap times, telemetry, and driver performance metrics.
– Built predictive models to evaluate driver performance trends and assess race strategy effectiveness.
– Enhanced data visualisation workflows, reducing analysis time by 30% through interactive dashboards.

SmartSense AI Kitchen Hood (V-Guard) | AI, IoT, Cloud August 2024 – October 2024
– Implemented a real-time whistle detection and LPG gas monitoring system, improving household hazard response time by 40%.
– Integrated IoT sensor streams with cloud-based analytics pipelines using Google Cloud Platform and REST APIs.

Drought Prediction and Analytics Pipeline | ML, Data Engineering December 2023 – February 2024
– Designed an automated ETL pipeline for preprocessing and transforming large environmental datasets.
– Built a regression-based predictive model achieving 85% accuracy in drought risk forecasting.
– Performed statistical analysis and feature engineering to improve model generalisation.

Tinku: Mood-Based Media Recommendation System | NLP, Generative AI November 2023 – January 2024
– Constructed a sentiment analysis model to classify user emotions and deliver personalised media recommendations.
– Improved recommendation relevance using NLP-based text preprocessing and embedding techniques.

TECHNICAL SKILLS

Programming: Python, Java, C, R, SQL

Machine Learning: Regression, Classification, Supervised Learning, Model Evaluation, Feature Engineering

Deep Learning: TensorFlow, PyTorch, Keras

Data Engineering: ETL Pipelines, Data Cleaning, Apache Hadoop, Distributed Computing

Cloud and DevOps: Google Cloud Platform (GCP), AWS, Azure, Docker, REST APIs

Tools: Git, GitHub, Flask, FastAPI, React

CERTIFICATIONS AND ACHIEVEMENTS

- Top 5 Finalist among 300+ teams in V-Guard Big Idea 2024 for AI-based IoT safety innovation.
- Winner of Hack for Humanity for building a data-driven drought prediction system achieving 85% accuracy.
- Google Cybersecurity Foundations; Google AI Essentials; IBM SkillsBuild.