Achu Raj

+91-8156833536 | achuraj.ind@gmail.com | github | linkedin | Portfolio

PROFILE

Aspiring ML Engineer with hands-on experience in Python-based automation, predictive modeling, and real-time computer vision systems, Machine learning, Deep Learning. Passionate about building saleable ML solutions that solve real-world problems.

EDUCATION

Certification in Data Science | Luminar Technolab Pvt Ltd | 2024–2025

- Focus Areas: Machine Learning, Deep Learning, NLP, Computer Vision, Data Management, Power BI, SQL
- Worked on model training and evaluation workflows, contributing to baseline model development and performance tuning.

Bachelor of Computer Applications (BCA) | Kerala University | 2021–2024

CERTIFICATION

Applied Data Science with Python Specialization, Luminar Technolab Pvt Ltd - Jan 2025 (link)

TECHNICAL SKILLS

- Programming: Python, SQL, JavaScript
- ML & Data Science: Pandas, NumPy, Scikit-learn, OpenCV, MediaPipe
- Frameworks & Tools: Streamlit, Django, Power BI, MySQL, SQLite, AWS, UIPath
- Concepts: Machine Learning, Deep Learning, NLP, Computer Vision, Data Visualization

EXPERIECNE

Inditronics Pvt Ltd | Pune, India

Data Analyst Intern | June 2025 - oct 2025

- Led the data preparation for an audio-based ML project by labeling, preprocessing, and performing quality checks on a large-scale dataset's.
- Pioneered the development of custom Python automation scripts that streamlined repetitive data processing tasks, boosting team productivity by over 40% and minimizing manual errors.
- Designed and delivered an interactive Power BI dashboard to communicate key insights, enabling the team to make datadriven decisions and improving report clarity for stakeholders.

PROJECTS

Driver Drowsiness Detection System oct-2025

- Engineered a real-time system using Open-CV and Media-pipe to classify driver states (Focused, Distracted, Drowsy) through facial landmark and eye-aspect-ratio analysis.
- Implemented eye aspect ratio (EAR) and mouth opening ratio algorithms for accurate state classification
- Improved processing speed by 15% by optimizing the image processing pipeline, enabling smoother real-time video analysis.
- Tools: Python, Open-CV, Media-pipe, NumPy

Sales Forecasting System Jan-2025

- Developed and trained a Random Forest Regression model on historical sales data, achieving 82% prediction accuracy.
- Feature engineering and hyperparameter tuning to optimize model performance
- end-to-end deployment, creating an interactive Stream-lit web application to visualize forecasts
- Tools: Python, Scikit-learn, Pandas, Streamlit, Matplotlib

Student Management System sep-2025

- Spearheaded the design and development of a full-stack Django application, managing the complete software life cycle from concept to deployment.
- Full-stack web application with user authentication, admin panel, and student record management
- Implemented CRUD operations with Django ORM and SQLite database
- ◆ Tools: Django, Python, SQLite, HTML, CSS, JavaScript

LANGUAGE English (Professional Proficiency) Malayalam (Native Proficiency)