GAURAV GANJU

Full Stack Developer & AI Engineer

----- EXPERIENCE -----

RoshAi Autonomous Vehicle Solutions

Dec 2024 - Sep 2025

Full Stack & AI Engineer Intern

- Computer Vision Defect Detection: Deployed camera-based deep learning systems at Nokia and NCR Atleos for automated quality inspection, reducing inspection time by 50% and achieving 10% reduction in labor costs through CNN-powered defect detection on production lines
- 3D Laser Scanner Development: Engineered custom point cloud-based gel detection system using 3D laser scanner with dual-motor Arduino Mega control system for X-Y axis movement, enabling precise volume estimation of 2-10mm radius thermal gels and optimizing material usage costs
- Built a Lead Management System as an internal tool resulting in 10% increase in conversion rates and also made a requisition system for the administration that led to a 30% reduction in procurement delays by managing all incoming requests.
- Mentored 4 AI Support Engineers on computer vision pipeline development, data collection methodologies, CNN training, and production deployment strategies
- Experimented with several Machine learning algorithms like Random Forest, XGBoost, LightGBM,K-Means, DBSCAN etc. for Tata Motors using large-scale CAN bus and telemetry data analysis for anomaly detection, predictive maintenance, driver behavior analytics
- Designed and developed a clean, responsive and modern website for the company, also added unique UI interactions. You can check it out here.

Infosys Apr 2023 – May 2023

iOS App Development Intern | Chennai, Tamil Nadu

- Selected among 50 of 500+ applicants for Apple-Infosys joint initiative promoting Swift development and design principles
- Collaborated in cross-functional team developing native Hospital Management System using SwiftUI and Firebase
- Implemented RESTful API integration using Node.js, Express.js, and Nodemailer for email functionality

Coding Ninjas Club SRM

Jun 2021 - Mar 2022

App Development Associate | Chennai, Tamil Nadu

- Organized technical bootcamps, hackathons, and industry speaker events for 200+ participants
- Created technical content strategy for social media engagement and student community building

------PROJECTS

CogniQuest | iOS Application & ML Model

College Project

Skills: SwiftUI, TensorFlow, CNN, Firebase, Flask API

- Developed assistive learning app for neurodivergent children with handwriting recognition capabilities
- Trained custom CNN model using Kaggle dataset and image augmentation techniques achieving about 95% accuracy for character recognition.
- Architected Flask API deployment pipeline and integrated flask API inference with SwiftUI frontend.

CareTrack | Hospital Management System

Team Project

Skills: SwiftUI, Figma, Firebase Auth, Firestore

- Collaborated in 10-person development team creating comprehensive healthcare management platform
- Developed patient appointment booking, prescription management, and medical report access features

----- TECHNICAL SKILLS -

Programming Languages

Python, Swift, JavaScript, SQL, C/C++, Kotlin, HTML/CSS

Frameworks & Libraries

- Frontend: React, Next.js, SwiftUI, UIKit
- Backend: Django, Flask, FastAPI, Node.js, Express.js
- AI/ML: TensorFlow, PyTorch, Keras, Scikit-learn
- Computer Vision: YOLO, ResNet, OpenCV
- Data Science: NumPy, Pandas, Matplotlib

Databases & Cloud

MongoDB, PostgreSQL, MySQL, Firebase, Google Cloud, Azure, Kubernetes

Development Tools

Git, Docker, Jira, Postman, Selenium, Arduino SDK

Specialized Technologies

WebRTC, WebSockets, RTSP, LLMs, LangGraph, Point Cloud Analysis, Serial Communication

Design & UX

Figma, Adobe XD, Wireframing, Prototyping, User Testing, Atomic Design

----- EDUCATION -----

SRM University

June 2024

BS Computer Science | Chennai, India

GPA: 8.77/10.0

• Relevant Coursework: Artificial Neural Networks, Digital Image Processing, Natural Language Processing, Formal Language & Automata Theory

—— CERTIFICATIONS & AWARDS —

2024 IEEE Publication: "CogniQuest: AI-Powered Learning Assistant for Neurodivergent Children"

2022 PALS Virtual Lab Certificate: Control Engineering Laboratory Development (HTML/CSS/JavaScript)

2022 Google UX Design: UX Design Process & Foundations

2022 Apple Swift: Introduction to Programming Using Swift

2021-2022 University of Michigan: Python Programming Specialization (Coursera)

——— ADDITIONAL INFORMATION ——

Languages

English (Fluent), Hindi (Native), German (A2 Level), Kashmiri (Native)

Industry Knowledge

Autonomous Vehicles, Computer Vision, LIDAR Technology, Point Clouds, SLAM, Industrial Automation