

Adarsh K Sundaresan

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SUMMARY

Front-End Developer with hands-on experience in React, Figma, JavaScript, Node.js, MongoDB, and SQL. Strong programming skills in Java, Python, and C. ML and AI enthusiast with foundational knowledge in data science and machine learning concepts. Passionate about building responsive, user-focused applications and exploring innovative technologies.

TECHNICAL SKILLS

Programming Languages: Python, Java, JavaScript, C

Frameworks/Libraries: React, Node.js, Flutter, Tailwind CSS

Database: MongoDB, SQL

Tools/Practices: Git, GitHub, Postman, VS Code, Agile, Version Control

EDUCATION

B.Tech in Computer Science and Engineering — Amal Jyothi College of Engineering, KTU

2022 – Present

Higher Secondary Education (91.5%) — SNHSS Poothadi

2019 – 2021

PROJECTS

Smart Ways – Smart Traffic Management System

YOLOv11, OpenCV, LSTM, Golang, Python, MongoDB, JavaScript

- Built an AI-assisted traffic control system using YOLOv11 for real-time vehicle detection and LSTM for traffic prediction.
- Designed and implemented a Modified Priority Round Robin (PRR) algorithm with dynamic green light timing.
- Developed real-time signal control via WebSocket and enabled junction coordination for smoother vehicle flow.
- Integrated MongoDB for storing traffic data and analytics, and provided manual override controls for testing.
- Included emergency vehicle priority detection using radar-based recognition and clearance logic.
- Created a dynamic frontend for signal visualization using JavaScript Canvas and integrated it with live backend updates.

Portfolio Website

React, HTML, CSS, JavaScript

- Designed and developed a responsive portfolio website to showcase projects, skills.
- Implemented smooth animations and transitions using Framer Motion for enhanced user experience.
- Used React with modular components and Tailwind CSS for a clean and modern UI.

EXPERIENCE

Data Science Intern

12 June 2025 – 12 July 2025

Luminar Technohub

Kochi, India

- Worked on real-time data preprocessing, visualization, and feature engineering using Pandas and Matplotlib.
- Built and evaluated machine learning models including Logistic Regression.
- Gained hands-on experience with model training, and performance evaluation.

ACHIEVEMENTS

- Awarded **Best Department Project** for *Smart Ways – Smart Traffic Management System* at AJCE Mastermind 2025.
- Presented research paper on *Intelli Traffic Management System* at NACORE 2025.