

Naveen Jayaraj

[Personal Mail](#) | (+91) 8848638893 | Kozhikode, Kerala | [LinkedIn](#)/[GitHub](#)

EDUCATION

SRM Institute of Science and Technology

Expected: September 2027

B. Tech CSE with AIML

GPA: 9.27

Sree Gokulam Public School

May 2023

CBSE Science with Computer science

Percentage: 89.20

WORK EXPERIENCE

RedBus, India

Intern

Aug. 2025 – Present

Bengaluru, Karnataka

- Redbus India is a leading platform for booking bus, train, and intercity travel, serving millions of users across India.
- Developed an AI-driven pipeline for **automated pothole detection and route mapping** using YOLO and Qwen2.5-VL on 9,909 road videos; integrated a dynamic web map to visualize potholes along selected routes.
- Stack:** Python, YOLOv8, Qwen2.5-VL (via Ollama), HTML/CSS, Leaflet.js, OpenRouteService
 - Built end-to-end infrastructure with **90% detection accuracy** — imagine safer rides, fewer bumps, and smarter infrastructure decisions. That's the value.

Srishti Innovative Educational Services

Intern

9 Dec – 20 Dec 2024

Trivandrum, Kerala

- Srishti Innovative Educational Services** is a tech education company providing hands-on training in AI, software, and web technologies. Completed a 2-week **AI/ML internship**, working on real-world applications of machine learning algorithms, model training, and predictive analysis with live project demos.
- Stack:** Python, scikit-learn, pandas, NumPy, Jupyter

AICTE–Eduskills (in collaboration with Google & AWS)

Intern

Remote

- Completed four virtual internships: Google AI-ML (July–Sept 2024), AWS Cloud (Oct–Dec 2024), AWS AI/ML (Jan–Mar 2025), and Eduskills Web Full Stack Development (Apr–June 2025), gaining hands-on experience in AI/ML, cloud computing, and full-stack development.

PROJECTS

[Wildfire Detection and Reporting System](#)

A real-time wildfire monitoring web application built in Python, Flask, HTML, CSS, and JavaScript, integrated with OpenCV for live video capture and YOLO (Ultralytics) for fire detection, and using SQLite for storing detection reports and user data.

[Hotel Management System](#)

A room, customer, and booking management application built in Java, Swing, and JDBC, integrated with MySQL for data storage, featuring both console-based and GUI-based modules for adding, viewing, editing, and deleting hotel records.

[Fitness Tracking and Calorie Prediction Tool](#)

A fitness tracking web application built in Python, Flask, and Scikit-learn, featuring a machine learning model for calorie burn prediction using personalized activity data, with preprocessing handled by scaler.pkl and trained models stored in calorie_model.pkl. Integrated with Jupyter Notebook for model development and trained on a custom fitness dataset.

RESEARCH

Deep Learning for Wildfire Detection: Optimizing YOLOv11s for High-Precision Fire Identification

Researcher

- Built a custom-curated wildfire dataset (3.3K+ high-quality images) and supercharged YOLOv11s with aggressive augmentation, preprocessing, and optimizer tuning to detect fire from CCTV, UAV, and satellite imagery with precision nerd-mastery.
- Achieved mAP@50 of 0.84 and mAP@50–95 of 0.56, slashing false positives and boosting recall through fine-tuned training, ablation-guided optimization, and rigorous validation under real-world conditions.

VOLUNTEERING

Sevabharathi – Palliative Care Support

21 June– 8 July 2025

- Completed a 15-day social service program (21 Jun – 8 Jul 2025) supporting palliative care patients, uplifting health and dignity through hands-on assistance and community engagement.

Event Organizer - Neuro Tech Titans Club, SRMIST Trichy

- Organized the "Tech Shield Technical Quiz," managing logistics and enhancing coordination and communication skills.

CERTIFICATIONS, SKILLS & INTERESTS

- Certifications:** NPTEL: Introduction to Database Systems, ICT Academy Learnathon, HackerRank Python (Basic), MATLAB Onramp, Machine Learning Onramp, Computer Vision Onramp
- Skills:** Python, C, Java, HTML, CSS, JS, YOLOv12, U-Net, SQLite, MongoDB, Ollama, Leadership, Teamwork, Critical thinking
- Interests:** Camping; Trekking; Reading; Youtube; Cycling; Riding; Chess; History