

Nathan Jose V

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EDUCATION

GOVERNMENT ENGINEERING COLLEGE KOZHIKODE

B.TECH, APPLIED ELECTRONICS & INSTRUMENTATION ENGINEERING
Calicut, Kerala
CGPA: 7.0 / 10.0 | Grad: Jun 2026

DON BOSCO SENIOR SECONDARY SCHOOL VADUTHALA

INDIAN SCHOOL CERTIFICATE (ISC) - PCM COMPUTER SCIENCE
Kochi, Kerala
Percentage: 88% | May 2021

SKILLS

PROGRAMMING LANGUAGES:

C, C++, Java, Python

WEB & SOFTWARE

DEVELOPMENT: Data Structures & Algorithms using Java, Flask, REST APIs, Google Apps Script, HTML, CSS, JavaScript

EMBEDDED SYSTEMS &

ELECTRONICS: ESP32, Raspberry Pi, Arduino, RTC Modules, Sensors & Actuators, Circuit Design (LTspice), Instrumentation & Control Systems

TOOLS & PLATFORMS: Git/GitHub, VS Code, MATLAB, Android Studio, Linux

COURSEWORK

GRADUATE

- Internet of Things (IoT)
- Python for Machine Learning
- Computer Architecture & Embedded Systems
- SCADA

OTHERS

- Data Structures & Algorithms using Java (NPTEL IIT Kharagpur)
- Python (Kaggle)
- Prompt Design in Vertex AI (Google Cloud)
- Generative AI (Google Cloud)
- Large Language Models (Google Cloud)
- Responsible AI (Google Cloud)
- 5G Bootcamp: Explore, Build, Hack (IIIT Delhi)

EXPERIENCE

GREEN ROSES GARDENS | WEB DEVELOPER

July 2025 – Present | Freelance

- Designed and developed a fully responsive portfolio website, showcasing projects, services, and testimonials.
- Implemented a dynamic review submission & display system using Google Apps Script integrated with a Google Sheet backend.
- Deployed link: www.greenrosesgardens.com.

MAGUS ACADEMY | COMPUTER SCIENCE TUTOR

Jan 2024 – Present | Part-time

- Mentored 100+ students (UG & Pre-University) in foundational CS: C Programming, Data Structures, and Introduction to Machine Learning.
- Designed and delivered targeted modules, demonstrating mastery of fundamentals and strong technical communication skills crucial for engineering coursework.

PROJECTS

EDGE AI CLASSROOM ENGAGEMENT ANALYTICS

Jul 2025 - Present | AI/ML, CNN, Edge Computing

- Prototyping an **Edge AI** system deployed on Raspberry Pi for classroom engagement monitoring using **CNNs** and **IoT** sensing.
- Training CNN models targeting 85% accuracy on pilot datasets; deploying inference on **Raspberry Pi** to cut cloud latency by 40%.
- Building a real-time **Flask + WebSocket** dashboard to visualize engagement insights and support adaptive teaching strategies.

SMART PET FOOD DISPENSER

Oct 2024 | ESP32, RTC, Ultrasonic Sensor, Buzzer

- Built an automated pet food dispenser on an **ESP32** using **C++** and **Embedded logic**, ensuring consistent, unsupervised feeding.
- Implemented **RTC** scheduling and **ultrasonic sensing** coupled with **servo motor** actuation for reliable operation (95% test accuracy).

LEADERSHIP EXPERIENCE

IEEE COMPUTER SOCIETY KERALA CHAPTER

Student Representative | Jan 2025 - Present

- Represents 3,000+ student members across Kerala, driving regional initiatives, fostering inter-chapter collaboration, and bridging leadership with grassroots engagement.

Malabar Hub Student Representative | Jan 2024 - Dec 2024

- Scaled student engagement, orchestrating 10+ events including a National Hackathon (Slashkey 3.0) that impacted 500+ students.

IEEE COMPUTER SOCIETY SBC GEC KOZHIKODE

Founding Chairperson | Jan 2024 - Jan 2025

- Founded IEEE CS SBC at GEC Kozhikode, scaling membership to 75+ students and leading 10+ events, including hosting the 10th edition of AKCSSC, the flagship convention of IEEE CS Kerala Chapter.

LAKSHYA TECH FEST GEC KOZHIKODE

Technical Head | Jan 2024 - May 2024

- Revived Lakshya, GEC Kozhikode's National Level Tech Fest, as the Technical Head after a five-year hiatus.
- Led the technical infrastructure for the fest, overseeing website deployment, online registration, and core event logistics.
- Coordinated the setup and testing of technical equipment and networking for 7 workshops and 25+ events.