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# NIRANJAN K R

## About

Driven Electronics and Communication Engineering student at **CUSAT** with a strong focus on **Embedded Systems, AI, and Unmanned Aerial Vehicles (UAVs)**. Proven track record in hardware-software integration, ranging from digital security systems to complex quadcopter assembly and flight dynamics

## Education

### SSLC-KERALA STATE

CARMEL HSS CHALAKUDY  
2009-2021

### HIGHER SECONDARY EDUCATION

ST JOSEPH'S EMHSS  
2021-2023

### BACHELOR OF TECHNOLOGY

COCHIN UNIVERSITY  
2024-Present

## Skills

- **Programming:** C (Certified), MATLAB
- **Domains:** Artificial Intelligence (AI), Generative AI
- **Hardware:** UAV Assembly, ESC Wiring, Flight Controllers, Digital Gate Circuit Design
- **Software Tools:** Simulink Modeling, Matrix Manipulation, Programming Constructs

## Experience

### Digital Electronics Project: Digital Lock System

- Digital Lock System (Digital Electronics Project) Designed and implemented a security system utilizing digital gates and logic.
- Managed the end-to-end circuit design, implementation, and hardware debugging process. Collaborated with a team to build a functional security prototype

### UAV WORKSHOP

- Workshop at IIIT Kottayam Completed an intensive 3-day workshop focused on Unmanned Aerial Systems
- Assembled quadcopters from scratch, including wiring Electronic Speed Controllers. Debugged flight controllers and executed real-time drone flight dynamics.

### DESIGN AND FABRICATION PARTICIPANT

- HERTZ 7 (ECSA, CUSAT) Engaged in hands-on fabrication techniques using innovative engineering tools.
- Competed in the Microcontroller Challenge, testing hardware coding and logic skills.

### CERTIFICATIONS

- Artificial Intelligence Training Program - IIT Kanpur (Feb 2025).
- MATLAB Skills for Simulink Modeling - MathWorks Training Services (June 2025).
- Programming in C - G-Tec Computer Education (Sept 2024).
- UAV Workshop - Gyaan Innovation Lab, IIIT Kottayam (June 2025).