



## Joshua Mani Vinod

Roll No.: B210616EC

BTech

Electronics and Communication Engineering

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🌐 GitHub Profile

🌐 LinkedIn Profile

## EDUCATION

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- **National Institute of Technology, Calicut** 2021-2025  
*BTech in Electronics and Communication Engineering* CGPA: 8.40
- **Navy Children School, Kochi** 2021  
*Physics, Chemistry, Math and Economics (A1 credit for all subjects)* Percentage: 97.4

## EXPERIENCE

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- **Centre of Excellence in Artificial Intelligence** June 2024-Present  
*Web development intern* NIT Calicut
  - Got an opportunity to work in the prestigious R&D Project - 'SAMUDRA' sponsored by the MoE, Govt of India
  - Worked on developing a Smart Decision Support System for Disaster Management focused on crowd and flood monitoring.
- **Stanley Black & Decker, Inc.** May 2024-July 2024  
*Summer Intern* Bangalore
  - Created a ML model to classify tools into normal, abnormal or heavy used based on tools performance.
  - Constructed a Python-based graphical interface that facilitated the classification of tools with ease; enabled team members to analyze data logs in under 5 minutes, eliminating previous 2-hour manual processes.
- **AutoMicroUAS Aerotech** June 2023-July 2023  
*Artificial Intelligence Intern* Remote
  - Enhanced and customized UAV functionalities using dronekit-python and dronekit-sitl, developed AI-driven UAV control systems, designed efficient flight plans with Mission Planner and Python.

## PROJECTS

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- **NIRNAI** Present  
*Developed a full-stack web application for flood and crowd monitoring*
  - NextJS, Flask, TailwindCSS, Firebase, GCP, Postgres, Twilio-API
  - In crowd monitoring, various scenarios like clogging, bottlenecks, and diverging are detected and analyzed in real-time, with each scenario being mapped accordingly.
  - In flood monitoring, real-time data from the IoT system is transmitted to the web, and alert calls are triggered using the Twilio API.
- **BookMySlot** April 2024  
*A web application to Coordinate, Book and Confirm multiple meetings all at one place*
  - NextJS, TailwindCSS, Firebase, Kinde authentication
  - Created centralized hub for coordinators to schedule meetings, while participants seamlessly book their slots and receive instant confirmation via email
- **Student Status Tracker** March 2024  
*Comprehensive application designed to maintain a comprehensive log of students' club involvement and status.*
  - MongoDB, ReactJS, Node.js, ExpressJS, Bootstrap
  - Provided functionalities such as Search, Pagination, Filter, Sort, Export To CSV, and more.
  - Implemented all CRUD operations and incorporated validation checks to ensure users can seamlessly execute their tasks.

## TECHNICAL SKILLS AND INTERESTS

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**Languages:** C++, JavaScript, Python, SQL

**Developer Tools:** VS Code, Postman, Jupyter Notebook, Git, Matlab

**Frameworks:** ReactJS, NextJS, Express, NodeJS, TailwindCSS

**Databases:** MongoDB, PostgreSQL, Firebase

**Soft Skills:** Communication, collaboration, problem-solving, Organisation, teamwork

**Coursework:** Microcontrollers, IoT, Machine Learning, Deep Learning for CV

**Areas of Interest:** Web development, AI/ML

## ACHIEVEMENTS

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- **Basketball:** Captained the winning team in the Inter-Dept and represented NITC at the Nationals in Jaipur.
- **ICA (Media Head):** Part of one of the best college clubs, learned how to manage a team.
- **Coding:** Solved overall 500+ problems on Leetcode, GFG and other platforms (link)