# S A NANDAN

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#### **OBJECTIVE**

An Electronics and Communication Engineering student with strong technical knowledge and problem-solving skills. Excited to work on meaningful projects and contribute to a growing organization.

#### **EDUCATION**

**AMC Engineering College Bangalore Karnataka** 

Expected 2025

**B E in Electronics and Communication Engineering** 

**CGPA: 7.71** 

Narayana PU College Bangalore Karnataka

2021

Stream: PCMC Grade:76.5

Janak Vidyalaya Bangalore Karnataka

2019

Grade:69.5

## **SKILLS**

**Technical Skills** 

Python, C, C++

**Tools/Technologies** 

OOPS, Arduino UNO, ESP32, VS Code, IE3D, VNA

**Soft Skills** 

Leadership, Teamwork, Time Management, Effective Communication

#### **EXPERIENCE**

## **Embedded system and IOT intern**

Aug 2024 - Sep 2024

Take it Smart PVT LTD

• Done project based internship in Take It Smart startup done automatic light control system using Arduino and esp8266 microcontroller.

#### **PROJECTS**

**Smart Vending Machine:** Developed a smart vending machine using Arduino Uno, RFID for user authentication and an LCD I2C display for product selection and transaction status. Integrated an IR sensor for accurate product dispensing and a keypad for item selection. Enabled secure, automated transactions and efficient user interaction through RFID and keypad controls.

**Smart ROBO Car Using ESP32:** Developed a smart ROBO car using an ESP32 and L298N motor drivers for movement control. Controlled the car via a mobile app over Bluetooth, enabling real-time navigation. Incorporated sensors for obstacle detection and autonomous path following, offering enhanced functionality and user control.

**Design and Development of Antenna Array for Wireless Communication:** Designed the antenna using IE3D software and applied fractal geometry to it. The antenna's performance was analyzed using a Vector Network Analyzer, measuring resonant frequency at 2.4 GHz, gain, bandwidth, and return loss. The results were compared and evaluated for improved efficiency and performance.

**Smart Agriculture System:** Developed an IoT-based smart farming system using ESP32, DHT11, and soil moisture sensors for real-time monitoring of temperature, humidity, and soil conditions. Implemented wireless data transmission and automated irrigation to optimize water usage.

### **ACHIEVEMENTS**

- Published a paper on titled Design and Development of Antenna Array for Wireless Communication in International Journal for Research in Applied Science and Engineering Technology. Published in Volume 12, Issue XII, Dec 2024.
- Achieved 3<sup>rd</sup> position in Robo Race Competition held in AMC Engineering College on 12<sup>th</sup> Jan 2024.

- Achieved 2<sup>nd</sup> position in Code of Duty Competition held in AMC Engineering College on 6<sup>th</sup> July 2022.
- Certified in Introduction to Electronics course by Coursera.
- Certified in Programming Fundamentals course by Coursera.
- Certified in Introduction to C Programming Variables Input Output course by Coursera.

## **HOBBIES:**

- Sports: Cricket, Football, Badminton, Chess.
- Photography

Recommended By: Dr Sandhya Rani S.R.

Technical Consultant

Versabyte Data Systems PVT.LTD