Karthik Tatineni

Hyderabad • 7995466261 • karthiktatineni34@gmail.com • linkedin.com/in/karthik-tatineni • https://karthiktportfolio.netlify.app/

EDUCATION

Bachelor of Technology in Electronics and Communication Engineering

Institute of Aeronautical Engineering • GPA: 6.5 • 11/2022

Coursework : Microprocessors and Microcontrollers, Control Systems, IC Applications, VLSI, Embedded Systems.

High School Degree

Excellencia Junior college • 07/2020 - 08/2022

PROJECTS

Smart Anti-Theft Bag

- Designed a smart anti-theft bag with ESP8266 and Telegram bot.
- Integrated RFID access control and real-time alerts for enhanced security.

Smart Home Automation

- Implemented home automation using ESP8266 and Cadio firmware.
- Controlled appliances through Alexa and the Cadio app.

Environmental Monitoring System with ESP8266

- Developed a system using ESP8266, DHT11, and MQ-7 sensors.
- Displayed temperature, humidity, and air quality data on a local web server.

Personal AI assistant using esp32

- Developed an ESP32-based AI using Gemini AI API, integrated with Speech-to-Text (STT) and Text-to-Speech (TTS) system
- An intelligent voice interaction AI in IoT applications.

Analog Audio Spectrum Analyzer

- Prototyped an Analog Audio Spectrum Analyzer on a PCB board using LEDs, resistors, capacitors, and diodes.
- Designed a circuit that directly drivers LEDs from audio signals for real-time visualization.

CERTIFICATIONS

Data Science Using Python • 07/2023 - 07/2023

National Small Industries Corporation

VOLUNTEERING & LEADERSHIP

National Service Scheme (NSS) • 08/2024 - 07/2025

Logistics Head • hyderabad, Telangana

Actively contributed as an NSS member, participating in community service, organizing social welfare activities, and working towards the betterment of society.

SKILLS

API Integration, Arduino IDE, Bash, C/C++, CSS, EDA tools, Firmware integration, HTML, Internet of Things (IoT), NI Multisim, Postman, Prototyping, Python, RF Technology