



Mr.SUNDARRAJAN.S

IoT Developer | Embedded Systems Trainer | Tech Innovator

Founder of

Skill Builder Academy

Mobile:8248819530 Mail:Mr.Sundarrajan99@gmail.com

ABOUT ME

Innovative and hands-on IoT developer with a strong background in embedded systems, microcontroller interfacing, and smart automation projects. With deep experience using platforms like Arduino, ESP8266/ESP32, and Raspberry Pi, I specialize in building real-time IoT solutions that integrate hardware with smart software systems using Python, Flask, and various communication protocols.

I've delivered numerous technical workshops and developed industrial-grade projects ranging from smart home automation to electronic fuel dispensing systems. I blend my passion for teaching with advanced prototyping to develop real-world applications that enhance efficiency, safety, and intelligence in both domestic and industrial sectors.

CORE COMPETENCIES

- IoT Hardware & Software Development
- Embedded System Programming (ESP8266/ESP32, Arduino, Raspberry Pi)
- Real-Time Automation Systems
- Home Automation (Apple HomeKit, MQTT, Blynk)
- PCB Design & Fabrication (EasyEDA, Laser Engraving)
- Python Scripting, Flask Web Development
- Telegram Bot API Integration
- Sensor Systems (GPS, MPU, Fire, Gas, Smell, etc.)
- Linux System Management (Ubuntu Server, Linux Mint)
- Excel Automation and Data Logging

WORKSHOPS CONDUCTED

- IoT Fundamentals
 - PCB Fabrication
 - Computer Hardware Workshop
 - Embedded Systems & IoT
 - Numerous project-based IoT and Python bootcamps across institutions
-

NOTABLE PROJECTS & INNOVATIONS

Smart Fuel System with UPI Integration

A cashless, automated fuel dispensing system that activates based on UPI payments and accurately dispenses fuel as per the paid amount.

Smell-Sensing Electronic Intelligence

A project exploring artificial sensory integration where sensors detect specific smells or gas combinations and simulate intelligent reactions.

Iris – Multi-Purpose Robot

A full Linux-powered robot with mobile base, hand/head servos, environmental sensors, camera, and voice interaction. Designed for elderly care and hospital support.

IoT Payment Sound Box

ESP32-C3 and SIM800L based UPI sound box with voice alert on successful payments. Later adapted to ESP8266 with Wi-Fi.

Smart Home Automation

Apple HomeKit-compatible smart system using ESP32/ESP8266 and HomeSpan to control lights, fans, and door locks with internet access.

Smart Attendance System

A Python-Flask based GUI app that manages Excel-based attendance with report generation and automatic email alerts.

CCTV & Alert System

ESP32-CAM based live video streaming to browser + Telegram alert with video clip when motion is detected.

Biometric-Based Arduino Control

eSSL biometric system integration to trigger external hardware like LEDs via Arduino Uno over serial communication.

Ticket Printing System (Hackathon & Symposium)

Custom-built registration systems with GUI, Excel integration, QR code ticket printing via 80mm thermal printer, pixel art generation, and database logging.

GPS & Gyroscope-Based Accident Alert System

Uses MPU and NEO-6M GPS with ESP8266 to detect abnormal tilts and send live location updates via Telegram to emergency contacts.

VISION

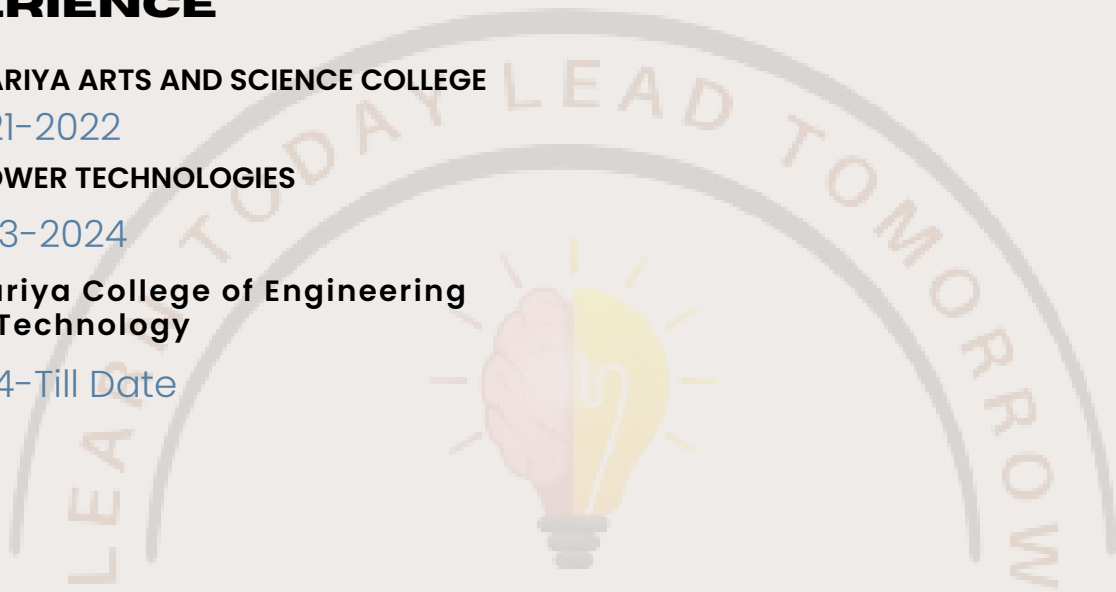
To design and deliver smart, real-time systems that make daily life more efficient and intelligent – through affordable tech, human-centric innovation, and practical education.

EDUCATIONAL BACKGROUND

- COMPLETED BSc. INFORMATION TECHNOLOGY
- COMPLETED DIPLOMA IN NETWORKING TECHNOLOGY"
- COMPLETED DIPLOMA IN "COMPUTER HARDWAREMAINTENANCES "

EXPERIENCE

- ACHARIYA ARTS AND SCIENCE COLLEGE
2021-2022
- TRIPOWER TECHNOLOGIES
2023-2024
- Achariya College of Engineering
and Technology
2024-Till Date



SKILL BUILDER