



# VISHWANATH KARUNANITHI

Electronics and Communication Engineer

## PROFILE SUMMARY

Electronics and Communication Engineering student with strong hands-on experience in embedded systems, Internet of Things, software-based systems, and artificial intelligence applications. Actively involved in real-world project development, hackathons, internships, and innovation challenges.

## EDUCATION

Bachelor of Engineering in Electronics and Communication Engineering

Velammal Institute of Technology, Chennai

2023 – 2027 (Pursuing) | CGPA: 8.47

Higher Secondary Education (CBSE)

Cauvery International School, Tiruchirappalli | 80.60%

Secondary School Education (CBSE)

Cauvery International School, Tiruchirappalli | 81.80%

## MAJOR PROJECTS

### Piracy Prevention and Detection

Designed a dual-layer system using IR integration and software-based detection to prevent unauthorized recording of digital content.

### Structural Health Monitoring (Software)

Developed a software-based system to analyze structural parameters and assist in early fault detection.

### Smart Non-Invasive Health Monitoring

Implemented a non-invasive system for continuous monitoring of vital health parameters.

### Electricity Tampering Detection and Smart Energy Meter

Built an embedded IoT-based system for real-time energy monitoring and electricity theft detection.

### Exam Hall Allocation System (Embedded)

Designed a microcontroller-based automated exam hall seat allocation system.

### Face Detection Using Artificial Intelligence

Developed an AI-based computer vision system for real-time face detection.

## ACHIEVEMENTS, INTERNSHIP AND INDUSTRY EXPOSURE

**Finalist – YUKTI Innovation Challenge 2025**, selected for the final stage based on innovation potential and technical feasibility.

**First Prize – Inter College Project Expo** for an embedded and software-based project evaluated by academic and industry professionals.

**Winner – 24 Hour Hackathon at Vellore Institute of Technology**, involving rapid problem solving and system implementation.

**Internship – One Yes Info Tech**, completed an EEPROM-based embedded project with implementation and documentation available on GitHub.

**Industrial Visits** to IIT Communication Laboratory and RETECH, gaining exposure to real-world engineering environments.

**Three Cash Prizes – AMS College of Engineering** across different technical events.

**TN Skills Competition**, selected up to Round 2, gaining insight into skill gaps and focused learning areas.

**Conducted a Technical Workshop** for school students on basic electronics and embedded systems.

## MINI PROJECTS AND TECHNICAL ACTIVITIES

Otto Blockly Robot with mobile application-based customization, home automation using Alexa and Sinric Pro, Bluetooth-controlled LED using MIT App Inventor, and completion of all basic LABVIEW exercises.

## CONTACT

### Email

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### Phone

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### LinkedIn

linkedin.com/in/vishwanath-karunanithi-087b62308

### Github

github.com/vishwanathkarunanithi

### Portfolio

vishwanathkarunanithi.github.io

## TECHNICAL SKILLS

Embedded Systems

Internet of Things

Arduino and ESP32

Sensors and Microcontrollers

Artificial Intelligence and Computer Vision  
(Basic)

Python (Basic)

## TOOLS AND PLATFORMS

Arduino IDE

MIT App Inventor

LABVIEW

Sinric Pro

GitHub

## LANGUAGES

English

Tamil