

# THILAK S

EMERGING ELECTRONICS ENGINEER

📍 Bangalore, India

📞 +91 8660319759

✉️ thilaks.ec22@rvce.edu.in

## PROFILE INFO

Detail-oriented and ambitious engineering student with a strong passion for precision and teamwork. Seeking an entry-level opportunity with a reputable company to apply my skills while further enhancing my knowledge and experience in the field.

## PROJECTS

2024

### Real-Time Sound and Object Classification System

- A Raspberry Pi-based system for real-time environmental sound and object recognition and classification using machine learning algorithms and audio sensors
- Used the TensorFlow framework to recognize objects and sounds, with YOLO (custom) being used for images and Keras algorithm for sounds.

**Raspberry Pi, Python, Audio Signal Processing, Embedded Systems, TensorFlow Lite**

2023

### Autonomous Solar Orientations & Optimization System (ASOOS)

- Applied Model Predictive Control (MPC) and MPPT algorithms enhancing solar energy capture through real-time adjustments.
- Ensured smooth integration of the STM32 micro module with existing solar setups, focusing on reliability and ease of maintenance capturing real-time solar data to maximize energy absorption.

**STM32, Embedded C, ARM Cortex-M Architecture, Peripheral Interfacing**

2023

### Bridge Rectifier using ExpEYES

- A high-precision wave measurement system using the Wein Bridge Oscillator circuit to generate stable frequencies and visualize it real time, data acquisition for better study.

**ExpEYES, Circuit Simulation**

## POSITION OF RESPONSIBILITY

2019-20

### **Cultural House Captain | Kendriya Vidyala, Hassan**

- Supervised 500+ students, organized school activities and served as a key point of contact between students and administration.

## EDUCATION

**2022 - 2026 | RV College of Engineering**  
**B.Tech. in Electronics and Communication Engineering**

CGPA: 7.56

**2023 - 2026 | Indian Institute of Technology, Madras**

**B.Sc. in Data Science and Applications**

CGPA: 6.57

**2022 | The Learning Centre PU College, Mangalore**

**XII (KSEEB)**

Percentage: 85.3

**2020 | Kendriya Vidyalaya, Hassan**

**X (CBSE)**

Percentage: 91.8

## SKILLS AND TOOLS

- Data Structures & Algorithms
- Keil uVision
- STM32CubeMX
- VLSI Design
- Raspberry Pi

## LANGUAGES

- Java
- Python
- Embedded C
- Verilog HDL
- C, C++
- Matlab