

# KARTHIK K

[karthikraj10530@gmail.com](mailto:karthikraj10530@gmail.com) | +91 9384747918

## OBJECTIVE:

Highly motivated and experienced embedded systems engineer with a strong background in C programming, microcontrollers, and software development. Proven track record of delivering high-quality projects on time, with a focus on innovation and efficiency. Skilled in problem-solving, team collaboration, and technical leadership.

## CERTIFICATES:

### PUMO TECHNOVATION INDIA Pvt. Ltd., EMBEDDED DEVELOPER :-

- Embedded C programming Language. Designing and developing Embedded software and hardware solution.
- Developed for 8051, PIC16F877A and STM32F446RE microcontrollers, ensuring efficient and reliable operation.
- Conducted hardware interfacing for various sensors, displays, designed and optimized communication protocols, including I2C, SPI and USART for seamless data exchange in embedded system.
- Development tools: MP-LAP IDE, KEIL, CODEBLOCKS, PROTEUS.

## PROJECT EXPERIENCE:

### • IMAGE PROCESSING BASED FIRE DETECTION.

- Developed an image processing-based fire detection system using Raspberry Pi, enhancing real-time safety monitoring and alert systems.

### • SMART IRRIGATION SYSTEMS.

- Designed a smart irrigation system using Arduino, optimizing water usage and improving agricultural efficiency through Automated control.

### • IOT BASED SMART ENERGY METER

- Designed a smart metering system using PIC microcontroller, optimizing energy usage and improving efficiency through Automated control and alert systems.

## INTERNSHIPS:

- POLENZA TECH SOLUTIONS-CHENNAI.
  - Raspberry Pi (picoW RP2040) and IoT based real-time applications.
- CODEBIND TECHNOLOGIES-CHENNAI.
  - Done many projects by using Embedded Systems

## EDUCATION SUMMARY:

- B.E Electronics and Communication engineering, Adhiparasakthi college of engineering, Ranipet district and obtained 81%. (2021-2025)
- HSC completed in Grace matric higher secondary school, Ranipet and obtained 88%. (2020-2021)
- SSLC Completed in Grace matric higher secondary school, Ranipet and obtained 83%. (2018-2019)

## ADDITIONAL INFORMATION:

- Technical skill: C programming, circuit design and simulation.
- Soft skill: strong communication and teamwork skills, with experience working in collaborative environment, critical thinking and problem solving.

## LINK:

- LINKEDIN: <https://www.linkedin.com/in/karthikk22>