# Abhinav Kalintha

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LinkedIn | GitHub

## OBJECTIVE

Eager to begin a career as an Embedded Software Engineer, bringing strong C programming, RTOS knowledge, and a passion for embedded systems to contribute effectively to innovative development projects.

## SKILLS

- **Programming Languages:** C, Embedded C
- **Embedded Systems:** RTOS, Microcontrollers (STM32), STM32 HAL (Hardware Abstraction Layer)
- **Operating Systems:** Linux, Windows
- **Data Structures & Algorithms (DSA):** Proficient in problem-solving and algorithm implementation
- **Communication Protocols:** I2C, SPI, CAN
- **Debugging & Tools:** JTAG, GDB, Keil, STM32CubeIDE
- **Simulation & Development Tools:** Wokwi, VS Code, MS Office
- **Version Control:** Git, GitHub+

## EDUCATION

**Vasireddy Venkatadri Institute of Technology** — March 2020-April 2024
Bachelor of Technology (B.Tech) in Electrical and Electronics Engineering — CGPA- 8.14

**Narayana Junior College** — June 2018 - May 2020
12th — Percentage- 91

**Chanakya High School** — *Completed May 2018*
10th — CGPA- 9.8

## EXPERIENCE

**Advanced Diploma Trainee – Embedded Systems** — June 2024 – Present
**Radar Institute of Technology, Bangalore**

- Trained in embedded system design using STM32 and STM32CubeIDE with HAL drivers.
- Developed real-time applications using RTOS and Embedded C.
- Worked with JTAG, Wokwi, and key protocols like I2C, SPI, UART, and CAN.
- Focused on low-level hardware programming and debugging techniques.

## CERTIFICATIONS

- **Introduction to Java Full Stack** – Wipro (2024)
- **Java for Software Engineering** – Udemy (2024)
- **Introduction to Full Stack Web Development** – HackerRank (2024)

## PROJECTS

**RTOS-Based Multisensor Monitoring and Actuation System using STM32 HAL | Link**

- Developed a real-time embedded monitoring system for smart automation using STM32 HAL and FreeRTOS.
- Integrated ultrasonic sensor (input capture) for distance measurement and ADC for motion detection.
- Controlled servo motor actuation using PWM, with real-time data displayed on a 16×2 LCD.
- Utilized FreeRTOS threads, timers, and interrupts to manage multitasking operations efficiently.
- Simulated a mini smart security/automation node demonstrating concurrent task handling in embedded systems.

## EXTRA-CURRICULAR ACTIVITIES

- Participated in internal college project expos
- Attended hands-on IoT/Embedded Systems workshops (STM32, Arduino, FreeRTOS)
- Completed the Total Personality Development Program by IMPACT Foundation

## HOBBIES AND INTERESTS

- Coin Collecting, Aquascaping
- Playing Cricket and Volleyball