

S. Prasanth

■ Coimbatore, India
■ +91 82200 81518
■ prasanth100800@gmail.com

Career Objective

Electronics and Communication Engineer with strong knowledge in embedded systems, circuit design, and hardware debugging. Experienced in I2C, SPI, UART, and PCB layout. Seeking a challenging position to contribute technical expertise and grow with a leading embedded/automotive company.

Technical Skills

- 1 Protocols: I2C, SPI, UART
- 2 Circuit Design: Analog and Digital circuit design
- 3 PCB Design Tools: KiCad (PCB layout)
- 4 Embedded Systems: Embedded C, AVR/Arduino, ESP32, STM32, Raspberry Pi
- 5 Debugging Tools: Oscilloscope, Logic Analyzer, Multimeter, Proteus, Multisim
- 6 Microcontroller Features: GPIO, Timers, ADC, PWM
- 7 Other: Soldering, hardware rework

Projects & Experience

- 1 UART Communication with ATmega328P – Implemented reliable serial communication for data logging and debugging using Proteus and hardware testing.
- 2 I2C Interfacing with DS1307 RTC and EEPROM – Designed and tested I2C communication, verified using logic analyzer.
- 3 SPI Communication with SD Card Module – Developed code for data storage and retrieval, validated with SPI analyzer.
- 4 8x8 WS2812B LED Matrix with Arduino – Created smooth left-scrolling text animation with zigzag pixel mapping.
- 5 Bluetooth Controlled Robot with Multiple Modes – Designed PCB for motor driver, integrated ultrasonic sensor and servo motor using Embedded C.
- 6 Raspberry Pi IoT Projects – Built data logging and web server applications using Raspberry Pi with I2C/SPI sensors.

Education

- 1 B.E. Electronics and Communication Engineering – Kathir College of Engineering, Coimbatore (2017 – 2021)
- 2 12th Standard – Swami Shivanandha School (2016 – 2017) – 76%
- 3 10th Standard – Swami Shivanandha School (2014 – 2015) – 87%

Strengths

- 1 Strong debugging and troubleshooting ability
- 2 Quick learner with passion for embedded systems
- 3 Hands-on experience with hardware and simulation tools
- 4 Team player with attention to detail