ABILASH G

EMBEDDED ENGINEER

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SUMMARY

Embedded Systems enthusiast with hands-on experience in microcontroller programming and efficient system development, sensor interfacing, and embedded firmware development. Skilled in Embedded C, PIC16F877A, STM32, Arduino, and communication protocols like UART, SPI, and I2C. Seeking an entry-level Embedded role to design and develop reliable real-time embedded systems.

TECHNICAL SKILLS

Tools & Software:

- MPLAB, STM32CubeIDE,
- Proteus, Arduino IDE, Linux

Programming Languages:

- C, Embedded C

Microcontrollers:

- PIC16F877A,
- STM32,
- Arduino

Embedded Concepts:

- ADC, Timers, Interrupts, GPIO, PWM
- UART, I2C, SPI

CERTIFIED COURSE

PUMOTECHNOVATION INDIA Pvt Ltd
Certified in Embedded Systems

- Learned microcontroller programming and embedded system design.
- Worked on sensor interfacing and hardware debugging.
- Gained hands-on experience in circuit design and firmware development.

PROJECT

Designed and implemented an intelligent automatic braking system for a car

- Obstacle Sensing: The system uses sensors to detect objects in front of a moving car
- Data Processing: A controller reads the sensor data and checks the distance to the obstacle.
- Automatic Braking: If the driver does not react, the system applies brakes automatically to
- avoid collision.
- Improved Safety: Helps reduce accidents, increases reaction speed, and enhances road safety.
- Interfaced the microcontroller ESP32, LCD, pressure sensor, IR sensor, vibration sensor, ultrasonic sensor.

EDUCATION

Dr.Mahalingam College of Engineering and Technology -Pollachi

B.E Electrical And Electronics Engineering — CGPA - 7.5 | 2021 - 2025

JSR Higher Secondary School -Madathukulam

HSC - 78 % | 2020 - 2021

JSR Higher Secondary School -Madathukulam

SSLC - 70 % | 2018 - 2019

Certifications

- **Industrial Automation Tools**
- **MATLAB Tool**
- **Advancements in digital design techniques and on-chip reconfigurable network architecture**

Achievements

Attended a 3-day workshop on industrial automation tools

Work Experience

Adhavan Paper Board Pvt. Ltd.

Trainee - 2023

Assisted in the operation and maintenance of electrical panels, motors, transformers and industrial machinery used in paper board manufacturing.

Gained hands-on experience in industrial electrical systems, including power distribution, wiring and safety procedures.

Supported the maintenance team in troubleshooting electrical faults and performing preventive maintenance.

TANGEDCO

Trainee - 2025

Assisted in the inspection and maintenance of substations, transformers, circuit breakers and switchgear.

Learned about HT/LT line maintenance, feeder operations, and load management practices.

Observed protective relays, metering systems, and fault analysis procedures.

Followed electrical safety standards, permit-to-work systems, and industry regulations.

Declaration

I hereby confirm that the information furnished above is true to the best of my knowledge and belief.

Abilash G