

Jarpula Padmavathhi

Embedded Software Engineer

A passionate and detail-oriented Embedded Software Engineer with hands-on experience in developing automotive safety applications using MATLAB/Simulink. Skilled in peripheral configuration, model-based design, and system testing. Committed to safety-compliant embedded solutions with a strong foundation in CAN communication and real-time control systems.



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📍 Madgul Mandal, Rangareddy district, Hyderabad, india

EDUCATION

Graduation(B.Tech)

Guru Nanak Institutions Technical Campus

08/2019 - 09/2023

Hyderabad, 78.3%

Courses

- Computer Science And Engineering

Intermediate Education

Sri Aakash Junior College

06/2017 - 04/2019

Hyderabad, 94.3%

Secondary School(x)

Navodaya Vidyalayam

06/2016 - 03/2017

Hyderabad, 78%

INTERNSHIP/TRAINING

ADVANCED DIPLOMA IN EMBEDDED SYSTEMS

06/2023 - 11/2023

Bengaluru, Karnataka

Training

- I got trained on C programming, Embedded C, Microcontrollers- LPC2148, Operating systems, Communication protocols-UART, SPI, I2C, CAN, RS-232, RS-422, RS-485, Linux.

WORK EXPERIENCE

EMBEDDED SOFTWARE GET

Starkenn Technologies

06/2024 - Present

Pune, India

Achievements/Tasks

- Configured peripheral drivers(ADC,CAN,GPIO)Using Simulink for ASIL B compliant Collision Avoidance System(CAS).
- Prepared System Requirement Specification (SRS)document for CAS system.
- Performed Model-in-the-Loop (MIL) testing for key CAS modules to verify logical behavior and ensure functional safety.
- Participated in board bring-up activities, testing peripherals including ADC, CAN, UART, and GPIO
- Implemented requirements traceability by mapping requirements to models and corresponding test cases, ensuring coverage and validation."

SKILLS

C Programming

Embedded C

Communication Protocols-UART,CAN,SPI,I2C,ADC,RS-232,RS-422,RS-485

Data Structures

Linux

Operating System

Simulink

Stateflow

PERSONAL PROJECTS

CAN Based Collision Detection And Avoidance (09/2023 - 11/2023)

- Designed and implemented a collision detection and avoidance system using Arduino Uno and CAN protocol. Integrated ultrasonic sensor for distance measurement to detect nearby objects. When an object is within a critical range, a buzzer alerts the driver and the system stops Automatically. Used MCP2515 CAN controller for communication, along with IR sensor, DHT11(for temperature monitoring), buzzer, and LED display for real-time feedback. Improved safety response time and demonstrated effective use of sensor integration and CAN communication in embedded systems

CERTIFICATES

Master MBD using MATLAB, Simulink & Stateflow

MATLAB Onramp

Stateflow Onramp

LANGUAGES

English

Full Professional Proficiency

Telugu

Full Professional Proficiency

Hindi

Professional Working Proficiency

INTERESTS

Gardening

Listening songs

yoga

Cooking recipes