

Mohini Sinnarkar

Embedded Software Engineer

Embedded Software Engineer with 1+ years of experience in the avionics domain at TIDC. Strong background in Electronics and Telecommunication, skilled in C, C++, DO-178B/C, and JavaScript. Having knowledge of embedded operating systems and RTOS, with a focus on developing robust and high-performance software solutions.

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WORK EXPERIENCE

Associate Software Engineer

TRANSDIGM Technologies India Pvt Ltd.

12/2022 - 03/2024

Bengaluru, Karnataka

Achievements/Tasks

- Experience in Software Verification and Validation of safety critical embedded software used in avionics systems.
- Extensive experience with DO-178B/C standards for the verification of Avionics Software.
- Good knowledge of Software Testing Life Cycle and Software Development Life Cycle, including knowledge of test project planning, test case, test procedure design, and post test defect analysis.
- Expertise in MCDC (Modified Condition Decision Coverage), a critical testing technique in avionics software development. Skilled in applying MCDC to ensure comprehensive coverage of conditional statements.
- Proficient in utilizing configuration tools such as DOORS and MKS Integrity for managing requirements and configuration management.
- Familiar with the ARINC 429 protocol, enabling reliable and efficient communication between avionics components.

EDUCATION

Technical Certification

PG- DIPLOMA Sunbeam Institute of Technology

03/2022 - 09/2022

Pune, Maharashtra.

Courses

- EMBEDDED SYSTEMS AND DESIGN (PG DESD)

Bachelor of Engineering

NDMVPS ADV. Baburao Ganpatrao Thakre College of Engineering

2017 - 2021

Nashik, Maharashtra.

Courses

- ELECTRONICS AND TELECOMMUNICATION ENGINEERING

SKILLS

Embedded C

C++ Programming

Object-Oriented Programming

Data Structure

Real Time Operating Systems

Knowledgeable in DO-178B/C avionics guidelines

Microcontrollers - STM32F407, ESP8266

Configuration Tools : DOORS, MKS Integrity

Comm. Protocols- UART, SPI, I2C, ARINC-429,CAN,USB

PROJECTS

Blind Assist Stick

- Developed an assistive device using ultrasonic and IR sensors for obstacle detection. Integrated NodeMCU (ESP8266) for wireless communication via Bluetooth, interfaced with STM32F407VG to process signals and generate real-time audio feedback for visually impaired users.
- Hardware Requirements : STM32F407G-DISC1, Ultrasonic Sensor[HC-SR04], Bluetooth Module[HC-05], IR Sensor Module[LM393], NodeMCU[ESP8266].

LANGUAGES

English, Marathi, Hindi

Full Professional Proficiency