

## DAMARLA KARTHEEK SATYA DHANUNJAY

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### Career Objective

To pursue a challenging career and be a part of progressive organization that gives a scope to enhance my knowledge and utilizing my skills towards the growth of the organization.

### Experience

**Software QA Engineer (Avionics) | 06/24 – 04/25**

**Skyroot Aerospace Private Limited Hyderabad, India**

- Establishes traceability from software requirements to detailed design.
- Builds test strategies and reviews specification documents; writes both functional and non-functional test cases based on mission requirements.
- Develops automated and manual test scenarios to validate high-level and low-level software design elements.
- Collaborates with the hardware team to integrate and complete tests, ensuring seamless integration of hardware, software, and firmware.
- Gains expertise in code inspection, modular-level testing, black-box and white-box testing, failure mode testing, and data logging.
- Sets up and maintains a configuration control system for onboard and checkout software.
- Conducts system-level software testing from package level to vehicle level and performs risk analysis.
- Drives innovation and continuously streamlines the overall testing processes.
- Researches and evaluates new tools, technologies, and testing methodologies.

### Academic Qualification

<b><u>Graduation:</u></b>	
<b>Institute:</b> Nova College of Engineering and Technology.	2018-2021
<b>Course:</b> B-Tech in Electrical and Electronic Engineering.	<b>CGPA: 7.04</b>
<b><u>Diploma:</u></b>	
<b>Institute:</b> Sree Kavitha Institute of Science and Technology.	2014-2017
<b>Course:</b> Diploma in Electrical and Electronic Engineering.	<b>Percentage: 72.45</b>

<b><u>SSC:</u></b>	
<b>School:</b> Zilla Parisadh High School.	2013-2014
<b>Course:</b> 10 <sup>th</sup> Standard	<b>CGPA: 8.5</b>

### **Languages**

- C Programming Language
- Embedded C
- Python

### **Protocols**

- UART
- SPI
- IIC
- RS485
- RS422

### **Primary skills**

- DMM
- DSO
- Logical analyzer
- LDRA
- DO-178 B/C
- Manual Testing
- Test Automation

### **Technical skills**

- Possess strong knowledge of the V&V (Verification and Validation) software development model.
- Maintain high proficiency in working with 8-bit and 32-bit microcontrollers based on ARM architecture.
- Have hands-on experience in interfacing with RS-485, photo interrupters, potentiometers, and stepper motor systems.
- Work on projects involving ADCs, timers, interrupts, and stepper motor control.
- Quickly learn and implement new technologies as required.
- Perform HIL (Hardware-in-the-Loop) testing and test hardware boards using DMMs; extensively utilize DSOs.
- Engage in board bring-up activities and initial hardware verification.
- Possess knowledge of aviation software standards, specifically RTCA DO-178B and DO-178C.
- Familiarity with software configuration management tools; and defect tracking tool.
- Strong background in Python-based automation testing
- Proficient in developing automation frameworks using Python
- Skilled at crafting Python scripts for end-to-end test automation.

## **Internship & Training**

- Electrical and Diesel Locomotives Working and Operations in South Central Railway in Diploma.
- Fire & Safety Training at Kings institute of fire & safety engineers in Diploma.

## **Projects**

- Minor Project on Simulation & Modulation of Battery Electric Vehicle in B-tech.
- Major Project on Modulation & Simulation of Hybrid Electric Vehicle in B-tech.
- Digital Thermometer with LCD Display using I2C.
- Interfacing and drive development for critical modules like: ADC, Timers, I2C, UART, SPI & GPIO.
- Led firmware V&V and execution for Vikram-1's power, ground-switching, and Head-Mounted Safe-Arm (HMSA) modules to ensure secure and reliable avionics sequencing.

## **Languages Known**

- Telugu
- English

## **Declaration**

I hereby declare that all the information provided above is true to the best of my Knowledge.

Signature

Damarla Kartheek Satya Dhanunjay