SRINIVAS ENJAPURI

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CARRIEROBJECTIVE

Seeking a challenging career that utilizes my skills to enrich my knowledge, as well as gives me a chance to be part of a team that contributes towards the growth of the organization.

EXPERIENCE

4years of experience in Design and Development of Aerospace vehicle's Simulators & Hardware-In-Loop Simulation of Avionics Systems.

PROFILEATA GLANCE

- Currently working in **RESEARCH CENTRE IMARAT (DRDO),**in Real Time Systems for Aerospace vehicles.

- Experience in modeling and simulation of avionics systems, data analysis and performance evaluation.
- Good understanding of Software developing lifecycle activities from start of project to closure.

- Specialized skills in establishing Real Time Simulation test setup (Hardware-In-Loop) for Avionic applications.

- Good Knowledge on Interprocess Communication (IPC).

- Expertise in Device Driver development for I/O interfaces (RS-422, MIL-STD 1553B, ADC and DAC) in RTOS, Linux platform.

- Experience in verification of in-vehicle protocols like MIL-STD1553, RS-422.

- Hands on experience on MIL-STD1553B protocols.

- Implementation of 1553B Bus monitor for Avionic systems Bus in C Language.

- Experienced in the test processes including Test Case Preparation, Test Execution, Defect tracking and Test Log Preparation along with Report generation.

- Interacting with Designers on defect clarifications and Test plan analysis.
- Experience on various phases of software testing including **OBC in Loop, Sensor In Loop, Sensor and actuator In Loop** Using Linux Platforms.

- Data Analysis and results plotting in MATLAB.

EDUCATION

- **B-Tech** in Electronics and Communication Engineering from Vaagdevi College of Engineering-Warangal, with 67.74% in the year 2018.
- **XII** from Narayana Jr.College, Hyderabad with **DISTINCTION** (81.6%) in the year 2014.
- **X** from Vignana Bharathi Vidyalayam, Warangal with 9.2GPA in the year 2012.

TRAINING

- Secured training in **EMBEDDED SYSTEMS** course for 6 months from **VECTOR INDIA Pvt Ltd** (Hyderabad).

TOOLS& TECHNOLOGIES

- **Software Tools** : 1553 loader (DDC), Microsoft Visual Studio 2008/2010, MATLAB 2018, Simulink (Basics), Microsoft office.

- **Hardware** : Sensor (FMS), Seeker, Actuators, OBC, INS, Data link, Telemetry.

- **Programming Language** : C Language, Basics of C++, M code (MATLAB).

- **I/O Interfaces & Communication Protocol** : RS-422, Analog to Digital Converters (ADC), Digital to Analog Converters (DAC), MILSTD-1553B.

- **Operating System** : Linux - Ubuntu, Red Hat, Centos, Windows Family.

- **RTOS** : Xenomai 2.6.3

PROFESSIONALEXPERIENCE

Employer : **Research Centre Imarat (DRDO) Hyderabad.** (Aug2019 Present)
Role : **Project Engineer**
Key Responsibilities :
√ Design and Development of Missile Model Simulators for Aero Space vehicles.
√ Verification & Validation of Mission software for Air and ground Launch Aerospace vehicles.
√ Inter Process Communication using FIFOS, PIPES.
√ Process/Thread Synchronization.
√ Development of relevant device drivers.
√ Testing of Hardware and Software using Error codes.
√ Troubleshooting hardware and software problems, installation of computers, peripheral Devices Networking Installation H/W along with software installation (workstation, industrial based PC), all application software's and configuring the systems for network.

PROJECTOVERVIEW

Organization : **Research Centre Imarat (DRDO) Hyderabad**
Title : Development of Real Time Embedded Software for Avionic Systems

Project Description :
This project deals with the development of 6DOF Plant model for aero space vehicles. This plant model application software consists of mathematical expressions for different algorithms.

Responsibilities:
1. Developed Non Real Time (NRT) simulation software in which the application software (control and guidance algorithms of avionic system) is implemented in a general purpose PC. This is a foremost activity which acts as a reference test setup before porting and running the application software on to the actual target.

- Coding and integrating above algorithms in a general purpose PC using C language (Microsoft Visual Studio), MATLAB and Simulink.

- Performing digital simulation to check logic correctness.

- Converted the NRT simulation software to Real Time embedded application software along with I/O drivers.

- Device Driver Development of I/O interfaces (ISA, PCI and local bus) like serial communication interface RS-422, Digital to Analog Converter (DAC) and Analog to Digital converter (ADC).

- Carried out Debugging, monitoring the data and timings of the individual tasks.

2. Establishment of Hardware-In-Loop Simulation test setup.
- Configured Onboard Computer - In-Loop test setup and performed real time simulation by integrating the target with all other avionic subsystem in closed loop for performance evaluation of embedded software and hardware.
- Data plotting and results analysis in MATLAB.
- Design and development of simulators for embedded avionic systems along with its I/O interfaces 1553B and RS-422, ADC, DAC using Linux Xenomai 2.6.3 (Real Time frame work on Linux).
- Implementing the simulator application in C language and integrating it with driver modules in Linux.
- Running the simulators in Real time using Xenomai.

PERSONALINFORMATION

Name	:ENJAPURI SRINIVAS
Fathers Name	: BIKSHAPATHI
Marital Status	:Married
Nationality	: Indian
Languages Known	:English,Hindi, Telugu.

DECLARATION

Iherebydeclarethatallthedetailsfurnishedabovearetruetobestofmyknowledge.Ifgivenanopportunity,I would perform up to the best of your expectations.

Date:
Place: Hyderabad

SRINIVAS ENJAPURI