Balija Pavan Kumar

Phone: +91 9533719773   **Email :** balijapavankumar333@gmail.com

CARRER OBJECTIVES:

I would like to associate myself with a challenging environment that provides opportunities for learning and career advancement. My goal is to excel in this field through hard work, perseverance, and dedication, while making the best use of my key skills, such as active listening, analytical thinking, and problem-solving.

PROFESSIONAL SUMMARY:

- Having 3.8 years of experience as a Software developer and Tester in **ADAPTIVE AUTOSAR PLATFORM and C++**.
- Developed Basic software components according to ADAPTIVE AUTOSAR specification.
- Developed Sample application to test AUTOSAR functionality.
- Experience of ADAPTIVE AUTOSAR configuration tools.
- Exposure in development and functional testing of **Cryptography**, **ara::core** and **Diagnostic** modules.
- Knowledge in AUTOSAR basic software components of **Cryptography, ara::core** and **Diagnostic** modules.
- Involved in testing and validating the **Adaptive AUTOSAR stack** on **RCAR S4** and **QEMU** virtual platforms to ensure proper stack functionality.
- Ability to understand the Customer requirements and Functional Specifications.
- Team player with good analytical and interpersonal skills**.**

TECHNICAL SKILL:

Programming Languages:	C++
Tools	Visual Studio code, CANoe, GIT Lab, Vector Cast Tool, Davinci developer Adaptive tool, Atlassian Tools (BitBucket, Jira), Git Lab, CodeBeamer(ALM), Axivion tool, AWS EC2 Instance, Yocto, QEMU, RCAR
Operating System	Linux (Ubuntu), Windows.
Skills	ADAPTIVE AUTOSAR PLATFORM

EDUCATION:

Qualification	Institution	Board/University	Passing year	Marks In %
B.Tech (ECE)	SMEISGI	JNTUA	2020	70.68
Class XII	GOVERNMENT JUNIOR COLLEGE	BOARD OF INTERMEDIATE, AP	2016	87.9
Class X	S R K MPL BOYES HIGH SCHOOL	BOARD OF SECONDARY, AP	2014	80

CERTIFICATION:

- Advanced Course in Embedded Systems at Vector India, Bangalore. (9 months)

AWARDS:

- **Thankyou Award**, AVIN Systems Pvt Ltd, Dec 2023.
  Description: Completing activities with minimal guidance.
- **Excellence Award**, AVIN Systems Pvt Ltd, Jan 2024.
  Description: Having an ability to maneuver through multiple domains with commitment & dedication.
- **Above & Beyonders Award**, AVIN Systems Pvt Ltd, Jan 2024.
  Description: In recognition and appreciation of outstanding performance and contribution for the project.

PROJECTS UNDERTAKEN:

PROJECT 1:

ProjectName	Integration of DIGNOSTIC Stack
Project Description	Bug fixing and Implementation of overall **DIAGNOSTIC** according to AUTOSAR specification and customer requirements.
Contribution	**My responsibilities included:** ➢ Analysis of customer requirements from the AUTOSAR Diagnostic specifications doc. ➢ Unit testing of entire Diagnostic stack using vector cast tool. ➢ Fixed all defects of Diagnostic stack. ➢ Fixed all static violations in Diagnostic stack. ➢ Involved ASPICE activities.
Tools Used	Visual Studio Code, Ubuntu, JIRA, CANoe, GIT Lab, Vector Cast Tool, Davinci tools.

PROJECT 2:

ProjectName	ARA: CORE Development of Adaptive Platform
Project Description	Implementation and integration of overall Adaptive AUTOSAR FC's according to AUTOSAR specification and customer requirements. **Adaptive ara::core** is one of the module used to provide the advance C++ libraries to all AUTOSAR modules.
Contribution	**My responsibilities included:** ➢ Analysis of requirements from the AUTOSAR Adaptive **ara::core** SWS document of 20-11. ➢ Unit Testing of **ara::core** according to the development code. ➢ Integration Testing of **ara::core** according to the development code. ➢ Written the Sequence diagram scripts and generating the sequence diagrams using PlantUML. ➢ Fixed the static violations in Adaptive Core development code.
Tools Used	Visual Studio Code, Atlassian Tools (BitBucket, Jira), CodeBeamer(ALM), GIT Lab, Axivion tool, JIRA.

PROJECT 3:

ProjectName	Cryptography Development of Adaptive platform
Project Description	Implementation and integration of overall Adaptive AUTOSAR FC's according to AUTOSAR specification and customer requirements. **Cryptography** is one of the modules used to provide cybersecurity of the applications in the vehicle from the hacker attacks and to verify the authenticity and integrity of the data.

Contribution	**My responsibilities included:**
	➢ Analysis of requirements from the AUTOSAR Cryptography SWS document of 20-11.
	➢ Implementation of Cryptography FC according to AUTOSAR_SWS_Cryptography pdf specifications.
	➢ Configuration of interfaces for Cryptography on ASTRA configuration tool.
	➢ Implementation of basic applications to invoke the Cryptography API's.
	➢ Functional Testing of Cryptography according to the development code.
	➢ Written the Sequence diagram scripts and generating the sequence diagrams using PlantUML.
	➢ Fixed the static violations in Cryptography development code.
Tools Used	Visual Studio Code, Davinci developer Adaptive tool, Atlassian Tools (BitBucket, Jira), CodeBeamer(ALM), GIT Lab, Axivion tool.

PROJECT 4:

ProjectName	**Testing and Validation of Adaptive AUTOSAR Stack on Virtual Platforms**
Project Description	Involved in testing the Adaptive AUTOSAR stack on **RCAR S4** and **QEMU** environments. The project required ensuring that the stack worked as expected in these environments, identifying any issues, providing solutions, and documenting the changes encountered. This also included testing the stack's performance, functionality, and integration with the virtual platforms.
Contribution	**My responsibilities included:**
	➢ Tested the Adaptive AUTOSAR stack on RCAR and QEMU environments.
	➢ Ensured proper functionality and performance of the stack in virtual environments.
	➢ Identified defects, troubleshooted issues, and provided solutions.
	➢ Used Yocto to build the stack and generate the ext4 file and kernel image.
	➢ Uploaded the generated ext4 file and kernel image into the virtual environment.
	➢ Documented the challenges and solutions faced during the process.
	➢ Worked with AWS EC2 instance for remote access and testing of the environment.
Tools Used	Visual Studio Code, AWS EC2 Instance, Ubuntu, Yocto, QEMU, RCAR.

STRENGTHS:

➢ Positive Learning Attitude.
➢ Dedication and Flexible to work.
➢ Team Worker.
➢ Good listener and communicator.
➢ Quick Learner.

DECLARATION:

I do hereby declare that the particulars of information and facts stated here in above are true, correct and complete to the best of my knowledge and belief.

Yours sincerely

Balija Pavan Kumar