

Ahila Kumari B
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Experience Summary:

- Over all 9+ years of experience in Automotive domain and Embedded Domain
- Worked as a Team Lead in Cluster (Car Dashboard) Projects
- Good knowledge in Software Development Life cycle
- Good knowledge on RTOS

Competencies

- Experienced in Instrument Cluster Firmware development using Embedded C, C++.
- Good knowledge in C Language
- Good exposure to AUTOSAR standards and AUTOSAR tools.
- Experienced in MVC (Model-View-Controller) architecture.
- Knowledge in Agile methodology and participated in daily scrum meetings, sprint planning and execution.
- Good experience in performing Unit Testing using VECTOR CAST C and Google Test for achieving good quality Software.
- Good exposure in Communication protocols like CAN.
- Experienced in embedded tools like CANlyzer, Canoe, Lauterbach Trace 32
- Experienced in static code analysis (MISRA, QAC)
- Ensure accurate release testing for all new applications
- Providing final decision on bug free fully functional software
- Creating development plans, project documentation
- Provide remote and onsite support for domestic and international customers
- Assisting juniors and developers during their work
- Establishing strong relations with the customers
- Train the new employees

Technical Expertise:

Language	:	Embedded C , C++
UI Development	:	Qt , Unity, Proprietary tool of MELCO, Visteon
Operating Systems	:	Windows 8,10 , Linux
Tools	:	CAN, Trace32 Lauterbach , Renesas rh 850 Win merge
Framework	:	Visual Studio
Bug Tracking	:	Mantis , RedMine, RTC

Educational Background:

B.E (ECE)	Noorul Islam College of Engineering	2011	83.2%
HSC	S.M.S.M H.Sc School	2007	93.3%
S.S.L.C	S.M.S.M H.Sc School	2005	90.4%

Professional Experience:

Visteon

Senior Software Design Engineer June 2021 to Dec 2021

Project Expertise:

Project	Nissan CMFB(Cluster)
Role	HMI Team Lead
Language	C,C++
GUI Framework	Unity

Description Nissan CMFB is 12 inch digital car cluster which has all the advanced features of a car. It has three modes like Sports Mode, Drive Mode and Enhanced Mode where the UI changes accordingly. It is an AUTOSAR based platform.

Responsibilities :

- Requirement study and analysis on HMI and Graphics requirements and Design change request documents (DCR's).
- Creation of high level and low level design documents
- Graphics Screen design using **Unity** - for **Kepler 2** platform
- HMI (instrument cluster) feature implementation.
- Request the necessary AUTOSAR interfaces for the module and use the interface in ui module
- Analyze the defects from validation team and closing the defects using defect management in RTC
- Followed agile methodology: daily scrum meeting about the task status, sprint level releases.

UST Global Chennai

Team Lead from May 2019 to Oct 2020

Project Expertise:

Project	Asda LockerBox(Kiosk)
Role	Participated in both GUI and business logic applications
Language	C++
GUI Framework	Qt

Description Asda Locker Box is like the Amazon locker. Customer orders products like groceries online and gets delivered to the locker box which has multiple temperature zones by entering order number. Along with handling user at Kiosk, it also serves multiple mobile users at the same time.

Responsibilities :

- Requirement study and analysis on Locker Box requirements
- Created UI screens with Qt
- Integrated the newly developed screens with the existing code and ensured the correctness of screen transitions

Project	Kia Motors Cluster development(BC3)
Role	Involved in Overall Cluster development
Language	C, VB script, CAPL Script
Tools	Renesas rh850, RTC, Visual studio, eFLASH Load, CANalyser
Development	Involved in design of Main Cluster features like CAN communication,

Warnings , Chime, USM(Set the setting and communicate with other ECU)

Description:

BC3 is a analog digital cluster which has driver information details like Trip Computer, Settings , TellTales and Warnings.Its a NON-AUTOSAR Based platform.This project has two variants SVC(colour TFT), STD(Mono TFT)

Responsibilities :

- Requirement study and analysis on HMI requirements and Design change request documents (DCR's).
- Creation of high level and low level design documents
- Understand the graphics design from Graphics design tool and write the logic for presentation
- Implement the Information screens code logic.
- Test plan preparation and testing.
- Software integration and perform the functional test on target instrument cluster.
- Analyze the defects from validation team and closing the defects using defect management in RTC
- Followed agile methodology: daily scrum meeting about the task status, sprint level releases.

Tata Elxsi ,Chennai

Specialist from Dec 2015 to May 2019

Project Expertise:

Project	Hyundai BDC
Role	HMI screen and Application development as a Lead
Development	IGDT, C, Embedded C, VB script, CAPL script
Tools used	Trace32, Lauterbach, RTC, CANalyser

Description:

Hyundai BDC is 7inch cluster digital cluster which has driver information details like trip computer,Settings TellTales and Warnings, TBT(Turn By Turn).Its a AUTOSAR Based platform

Responsibilities :

- Team Lead for HMI screens design and code logic.
- Requirement study and analysis on HMI requirements and Design change request documents (DCR's).
- Review design and code developed by team members.
- Test plan preparation and testing.
- Software integration and perform the functional test on target instrument cluster.
- Followed agile methodology: daily scrum meeting about the task status and sprint level releases.

Project	Hyundai OSC
Role	HMI Screen development and design
UI Development	IGDT , C, Animations

Tools used	RTC, CANalyser
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Description:

Hyundai OSC is a analog digital cluster which has driver information details like Trip Computer, Settings , TellTales and Warnings.Its a NON-AUTOSAR Based platform.This project has two variants SVC(colour TFT), STD(Mono TFT)

Project	BAIC
Role	HMI Screen development and design
UI Development	IGDT , C
Tools used	RTC, CANalyser

Description:

BAIC is a analog digital cluster .The TFT size is 7 inch.This cluster contains basic driver information Settings , TBT(Navigation), AV details , LKA details ,Telltale , warning , popup etc.,

QuEST Technologies Pvt Ltd, Trivandrum
Software Engineer from Aug 2011 to Aug 2015

Project Expertise:

Project	VOLVO SPA(Infotainment)
Role	HMI Screen development and design
UI Development	Edamame GUI Tool, C++
Tools used	Tortoise SVN, Visual Studio, Redmine ,Mantis

Description:

Volvo SPA [Scalable platform architecture] - Development of High End Infotainment system (IHU) for Head unit Display used in premium cars for Japanese clients. There are several interfaces between the user and the system like the physical buttons on the steering wheel, Touch and tap in Head unit, and microphone.

Responsibilities:

- Involved in the design of overall project development in HMI side
- Developing HMI (Both Screens and Service Layer)
- Develop Unit Test Cases and ensure 80% code coverage with the unit testing.
- Provided Necessary Technical Documentation.
- Providing knowledge transfer to new members in project

Personal Details:

- Father's Name : K. Bagavathi Perumal Pillai
- Date of Birth : 22-06-1990
- Gender : Female
- Marital Status : Married.
- Nationality : Indian
- Languages Known : English, Tamil and Malayalam

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Declaration:

I hereby declare that the above information furnished is true to the Knowledge and belief.

Place: Singapore

Yours truly,

Date:

(B.Ahila Kumari)