# Harshita Ch

# Systems Engineer (Embedded C++)

Cleveland, OH - Email me on Indeed: indeed.com/r/Harshita-Ch/1e2fef1aaa95ad02

Technical Skills:

Languages: C, C++

Web Technologies: Basics of HTML, CSS, JavaScript

Versioning Software: Clear Case, SVN Tortoise, CQ, Jenkins

Operating Systems: Linux, Windows XP/7, UNIX

Tools: IBM Rational Rhapsody, GL Studio, vim editor, putty,

G-Test, Parasoft, VM Ware

Scripting Language: Shell Scripting

#### Summary

- Proficient with extensive experience in Gathering requirements, documenting, making low level design involving sequence diagrams and state chart, developing and delivering various modules of infotainment system meeting deadlines with an intensive knowledge of Software Development Life Cycle (SDLC).
- Good knowledge in Infotainment domain.
- Well organized in analyzing, designing, development, reverse engineering and implementation of various modules of infotainment system using IBM Rational Rhapsody, GL Studio, C and C++ with strong Object Oriented Concepts.
- Hands on experience in using IBM Rational Rhapsody (in C++), GL Studio (For User Interface development).
- Fluid knowledge in Model-View-Controller (MVC) architecture pattern and Test driven methodologies to develop modules in infotainment system.
- Extensive experience in unit testing using G-Test (Google Framework).
- Extensive knowledge about software development guidelines for the C++ programming language developed by MISRA (Motor Industry Software Reliability Association).
- Extensive experience in the static analysis of the code using Parasoft.
- Compiling, Debugging and Testing on Embedded Linux Platform.
- Experience in using various version control tools like Rational clear case, SVN, CQ and DOORS.
- Hands on experience in flashing the hardware Infotainment Master controller (IMC) and Infotainment

Slave controller (ISC) and ICAN.

• Extensive experience in testing the software (Subsystem and adhoc testing) and fixing bugs after development to ensure robustness of the system.

Willing to relocate: Anywhere

Authorized to work in the US for any employer

#### WORK EXPERIENCE

## **Software Developer**

Honda R&D Americas - Raymond, OH - February 2017 to Present

## **Systems Engineer**

TATA Consultancy Services - Pune, Maharashtra - May 2014 to December 2016

Client: Jaguar Land Rover

Project: Next Generation Infotainment Systems Description: Next Generation Infotainment system is the infotainment system of Jaguar Landrover cars.

#### Responsibilities:

- Responsible for gathering the requirements, feasibility study, design, development, and debugging.
- Writing use cases for every feature and making Low level design document.
- Making sequence diagrams and state charts using UML -IBM Rational Rhapsody.
- Implemented Human Machine interface (HMI) of AVRCP (Audio Video Remote Control Protocol),

MTP (Media Transfer Protocol),

Auto Blinds (Sun Roof control) in Model-View-Controller architecture using GL Studio for

View development and IBM Rational Rhapsody for controller development in C++, Embedded Linux platform.

- Responsible for unit testing of the code after implementation of the code on G-test framework.
- Responsible for Static analysis using Parasoft to make the code MISRA compliant.
- Compilation of the code in Linux platform.
- Flashing the hardware with RPM (Red Hat Packet

Manager).

- Ad-hoc testing of the feature at system level.
- Used SVN Tortoise and CC for versioning.
- Logging defects on CQ and resolving them using DLT

Log traces and gdb.

• Flashing the hardware rig - Infotainment Master controller (IMC) and Infotainment Slave controller (ISC) and ICAN.

#### Summer Intern

Visakhapatnam Port Trust - Visakhapatnam, Andhra Pradesh - April 2011 to July 2011

Description: Designed Employee Management software in

C++

## **EDUCATION**

# **Bachelor of Technology in Electronics and Communication engineering**

Gandhi Institute of Technology and Management

# **SKILLS**

C++ (4 years), C (3 years), Linux (4 years), embedded systems (4 years), IBM Rational Rhapsody (4 years), GL Studio (3 years), Unit Testing (3 years), Parasoft (3 years)

# ADDITIONAL INFORMATION

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