**Jagat Singh Rathore**

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**Career objective**

I love to use my analytical, detail-oriented skills to improve services and products, reduce costs and lead times, delight customers. All the while engaging in new challenges and learning experiences.

**Responsibilities**

**I have worked as an AUTOSAR basic software integrator.**

**I have worked as a test automation engineer for embedded systems. The role was to develop and maintain Software for HIL device, IO driver and to create test scripts in python for IO drivers.**

**Skills**

* **AUTOSAR :** Fully familiar with AUTOSAR 3.1 SW Architecture, Methodology and Templates.
* **Languages:**Good in C/C++ programming for embedded systems. Excellent exposure to python for developing automated test scripts/Framework. Basic idea of XML, java, ant, JET
* **Tools:**CESSAR – CT (Configuration tool for AUTOSAR BSW modules), BMW diagnostic configurator, Lauterbach and winIDEA,dSPACEControlDesk .Eclipse (C,Python,Java). Altova XML,Vector Tools,WiresharkTestComplete,
* **Python Lib and modules:**pylib, ctypes, os,sys,re,win32com (minidom),PyQt4,matplotlib
* **Protocols:**ASY (RS232), LIN, CAN. Theoretical idea of SPI.HiQnet and AVB.
* **HIL device:**dSPACE simulator with processor DS1005 and IO cards (DS2211, DS5001, DS5101, and DS2302) to simulate and measure real time signals.
* **Configuration Management:** PVCS, Perforce, Synergy CM.

**Professional Experience**

**VCentric Technologies**

Designation: Python Developer

November 2013 – Present

**Project:**PyVilo

**Details:** A GUI development project for data visualization using Pyqt4 and matplotlib.

**Role:**Developer

**Continental Automotive Gmbh (Location - Germany)**

May 2012 – October 2012

**Me2 Gmbh (Location –Germany, Contract to Continental)**

September 2011 – April 2012

Designation: Project Engineer

**Project:**BMW BDC 2015

**Details:**This project was based on AUTOSAR 3.1 for body domain controller ECU

**Role:** I was responsible for integrating and configuring BSW modules in Project and helping other members in project to debug issues in BSW. I have updated MCAL layer from Freescale in project. I updated IO stack, COM stack, System services. I developed a Java pluget which reads out diagnostic jobs from odx containers and makes assembly connections from DCM to Application SW Components.

I have good understanding of AUTOSAR Meta model and its terminology like, Ports, Interface, Components, Connectors, RTE etc. I am familiar with JET technology which is used to generate configuration files in C out of xml based configuration.

**HARMAN International**

Designation: Software Engineer

May 2010 –August 2011

**Project:** dbxSC32/SC64-AVB

**Details:** Project was started with an idea to implement Audio/Video Bridging protocol for dbx devices. AVB is time-synchronized, low-latency audio and video over Ethernet networks--with perfect Quality of Service (QoS)--while retaining 100% compatibility with legacy Ethernet networks.AVB networks lower costs by eliminating the need for costly buffers while guaranteeing low end-to-end latency of less than 2 milliseconds over seven network hops.

**Role:** My role in this project was to test AVB protocol. A windows based application was an interface to access this protocol. We have also started test automation using a tool TestComplete.

**Siemens Information Systems Limited**.

Designation: Senior Systems Engineer

December 2007 – May 2010

**Project:** RTT (Real time testing)

**Details:** The idea of project was to test SW modules and IO drivers in real time. This test is consist of three subsystem, Host PC, HIL device, and test code on target board (Tricore, Power PC)

**Role:** My role was to develop and maintain Test SW modules on three subsystem of the project, Host PC, HIL device and Target board.

Developed test suites in python to automate testing for IO drivers like Timer driver, ASY, RAM driver. To cover the test requirements a similar ASY driver was developed on dSPACE and communication was fully controlled from host PC. Developed frame work in python using ctypes to control the TRACE32 debugger from Host PC. Wrapper class was created for the dll interfaces of the tool.Developed a generic python class, to provide graph functionality for signals using pylib (matplotlib).

Developed hand coded software modules in C for the hardware in loop (HIL) device – dSPACE and its IO cards like DS2211, DS5001, DS5101, DS2302. Developed a time scheduler on the target processor TC1796.This time scheduler provides the time position execution and time related recurrent calling of interface under test

**Achievements**

* Recovered faulty product devices in HARMAN which were planned to ship back to US. Got appreciation mail from India CEO.
* Nominated for innovative employee of the year in SIEMENS IO department.
* Consistent appreciation from customer for the quality of work done.

**Education**

B.E in Electronics and communication with 71% (**Honours**) from RajasthanUniversity in 2007.

**Personal Details:**

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| D.O.B | 19 Aug 1984 |
| SEX | Male |
| Nationality | Indian |
| Marital status | Married |