## Mr Amrendra Kumar, (IBM India Software Lab)

## Summary of Qualifications

- 12 years of profound development experience in **C++/11/14/17, Dockers, Jenkins, AWS, Linux, Windows, Multithreading, Thread Synchronization, Signals, IPC, Socket Programming, Data Structure, Design pattern and C++ STL.**
- Proficient knowledge & experience in C++11/14/17, Golang, AWS Developer, Docker, Jenkins.
- Proficient knowledge & experience in Multithreading, Thread Synchronization, Signals, IPC, Socket Programming, Data Structure, Design pattern and C++ STL.
- This involves using Jenkins, likely for continuous integration and continuous deployment (CI/CD), to automate the building of the Magen C++ source code for different operating systems.
- Docker for Source Code Building and Distribution.
- Utilizing Docker for building Magen C++ source code on various platforms such as RHEL, SUSE, and Windows. After building, the binaries and source files are pushed to Artifactory, a repository manager
- Experience in Adaptive Autosar Diagnostic for automotive infotainment system.
- Experience in Storage domain application Software Development & Integration.

## Tools & Technology Expertise

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| **Coding Languages** | C++11/14/17, Golan, AWS, Dockers, Jenkins |
| **Operating Systems** | Linux, Windows |
| **IDE** | Visual Basic, Eclipse, Notepad++, Vim, |
| **Software Tools** | GDB, putty, Octo build, Davinci configurator |
| **Versioning System** | Git, GitHub, SVN |
| **Open-Source Tools** | VM virtual box, VMware workstation player |

## Project Experience

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| **Project name: Magen-CPP** | **Duration: Current Project since June 2022** |

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| **Role** | Software Developer at IBM India software Lab |
| **Project Summary** | Project Information: Data Privacy (Magen-cpp) aims for efficient memory management by minimizing heap memory usage, relying on pointers and references for dynamic behavior, and following principles like stack allocation and singleton patterns. This strategy can lead to more predictable memory handling and potentially better performance in certain scenarios. |
| **Product** | Magen-CPP |
| **Platform** | Linux and Windows |
| **Tools** | C++, VSCode, GIT, MySQL, SQL, Oracle, CPD cluster,GDB |
| **Responsibilities** | ➢ Developing features in C++ for masking the data in different formats.<br>➢ This Product develops from scratch<br>➢ Implemented many new features as per requirement for masking state driver license<br>➢ Fixed number of issues reported customer.<br>➢ Developed unit test cases for help testing the features implemented by me. |

| **Project name: Adaptive Autosar Diagnostic** | **Duration: Sep 2019 – May 2022** |
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| **Role** | Technical Lead - Product Development |
| **Project Summary** | Project Information: Diagnostics is required to be performed on all ECUs to ensure there is no issue with any electronically controlled component of the vehicle. Any issue encountered by the automotive ECU is stored as Diagnostics Trouble Code (DTC) in the Electrically Erasable Programmable Read-Only Memory (EEPROM). These codes can be retrieved later using an automotive diagnostic tool. ▪ Diagnostic stack is made of below mentioned two main building blocks according to UDS ISO 14229-1.<br>1. Diagnostic Communication Management (DCM) When an automotive ECU receives a diagnostic request from the tester tool, the DCM pre-processes it. While it handles majority of the requests, any other request is routed to the functional software cluster (SWC).<br>2. Diagnostic Event Management (DEM) DEM is responsible for storing and processing diagnostic errors (events) and all the data associated with it. In addition to it, DEM provides the diagnostic trouble codes (DTC) to the Diagnostic Communication Manager (DCM) as and when required. |
| **Client** | Harman |
| **Platform** | Linux |
| **Tools** | C++, Linux, GIT, Gerrit, GDB |
| **Responsibilities** | ➢ Developing ECU store diagnostics trouble code in EEPROM features in C++<br>➢ Implemented many new features as per requirement of client<br>➢ Fixed number of issues reported by different customers.<br>➢ Developed unit test cases for help testing the features implemented by me. |

| Project name: EMC VNX | Duration: May 2017 – Sep 2019 |
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| **Role** | Consultant |
| **Project Summary** | VNX is EMC's unified storage platform meaning it has the ability to provide both block and file level storage. And mainly worked on different type of layer if driver related like mirrorView and sancopy. Most management tasks are conducted using a web GUI named Unisphere. |
| **Client** | EMC |
| **Platform** | Linux, Windows |
| **Tools** | source insight |
| **Responsibilities** | ➢ Coding for improvement plans<br>➢ Bug fixing for issues faced by customer and testers<br>➢ Basic and regression testing |

| Project name: HUMSUM | Duration: Jun 2015 – may 2017 |
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| **Role** | Senior Software Engineer |
| **Project Summary** | HP Smart Update Manager (HP SUM) is an innovative tool for firmware and driver maintenance on HP ProLiant and Integrity Servers, BladeSystem enclosures, Moonshot systems, and options. It provides a browser-based GUI or a command-line scriptable interface for increased flexibility and adaptability to customer needs.<br>HP SUM has an integrated discovery engine that finds installed hardware and current versions of firmware and software on target servers and identifies associated targets that should be updated in conjunction with each other, to avoid interdependency issues. |
| **Client** | HPE |
| **Platform** | Linux, Windows, QT |
| **Tools** | Visual Basic Studio C++, Vi Editor, SVN |
| **Responsibilities** | ➢ Developing security features in C++<br>➢ Development of the GUI using Jscript and HTM, understanding of feature and functionalities support, debugging and fixing of the issues/bugs<br>➢ Implemented many new features as per requirement of client (mainly for HP, Bloomberg)<br>➢ Fixed number of issues reported by different customers.<br>➢ Developed unit test cases for help testing the features implemented by me. |

| Project name: Ericsson | Duration: Dec 2013 – Feb 2015 |
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| **Role** | Software Engineer |
| **Project Summary** | EAM is used to set up connections with Network Elements (NE) of type AXEvia different protocols. It consists of EAC and External Access Handlers (EAH), EHM, EHT, EHIP, EHAP and EHMS for AXE.EAM core functionalities are Command and Response Handling, File Access and Subscription Handling EAM provides external interfaces to C++ applications and java applications to connect to nodes. |
| **Client** | ERIC_PLATFORM |
| **Platform** | Linux |
| **Tools** | Eclipse, ClearCase, Cygwin, Citrix, Netsim |
| **Responsibilities** | ➢ Coding for improvement plans<br>➢ Bug fixing for issues faced by customer<br>➢ Basic and regression testing<br>➢ Report generation such as Coverity and Bullseye.<br>➢ Clear case activities and Core dump analysis.<br>➢ Node creation and maintenance<br>➢ Documentation of development process. |
| **Project name: Hp_Iss_Nsp** | **Duration: Jan 2012 – Dec 2013** |
| **Role** | Software Engineer |
| **Project Summary** | Project is aimed at developing APIs and command line applications for accessing and configuring CNA cards supporting iSCSI, FCoE and NIC functionality. I am working as a developer for building a command line application compatible for both Windows and Linux. Implementation is in C++.The subsidiary task is testing of NIC drivers of different vendors, being used by HP and report problem to the concerned vendor. It also aims at developing different online firmware up-gradation tools. Implementation is in C++. |
| **Client** | HP |
| **Platform** | Linux, Windows, QT |
| **Tools** | Visual Basic Studio C++, Vi Editor, SVN |
| **Responsibilities** | ➢ Development of work packages<br>➢ Work on defects raised by Customer.<br>➢ Debug and resolve issues related to product<br>➢ Handling different Office profiles. |

## Professional Experience

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| IBM India Software lab | June 2022 – Till now |
| Harman Connected Services, Bangalore | Jan 2020 – May 2022 |

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| Capgemini Pvt Ltd. | May 2017 – Sep 2019 |
| Mphasis Pvt Ltd. | June 2015 – May 2017 |
| Wipro Pvt Ltd. | Oct 2011 – Feb 2015 |

## Education

| Degree | University/Board | Year of Passing |
|---|---|---|
| B.E(Information Technology) | MDU, Rohtak | 2010 |
| H.S.C | BIEC, Patna | 2005 |
| S.S.C | BSEB, Patna | 2003 |

## Advanced Training

- Completed training on C++11/14/17
- Completed training on GoLang
- Completed training on Basic Java
- Completed training on Perl

## Area of Interest

- Playing cricket and Badminton, Driving bikes and cars

## Personal Information

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| Date of Birth: | 02 DEC 1988 |
| Marital Status: | Married |
| Pan Card Number: | BXOPK4074Q |
| Passport Number: | K9556660 |
| Mobile Number: | 8971706958 |
| Email ID: | amren.sbit@gmail.com |
| Address: | 105-B, Adithya esquina,Varthur, Bangalore 560087 |

## Declaration

I hereby declare that above-mentioned information is correct up to my knowledge and I bear responsibility for the correctness of the above-mentioned particulars.

Place: Bangalore Amrendra Kumar