Darshan BV

Senior Software Engineer

Email : darshu.rnr@gmail.com
Mobile : +91-9740270102

A software professional with a good learning curve and application of learning in day-to-day work, and delivering good quality results. So far, I have C, C++, Python, Linux System Programming, Network Security technologies under my belt. I am good in learning new skill and programming languages, problem solving.

I am currently employed as Senior Software Engineer at Cisco Systems. I am hands on in all the stages of software development cycle. My tasks involve analysing software code, altering software code, fixing bugs & Customer debug sessions.

I have currently 10 years of experience, with a focus on Software Design and Development, with involvement in features like Hardware Offload for Cisco Firepower Threat Defence , Platform Software Development for Cisco Firepower platforms . Also, I have worked on the SNMP platform support for cisco UCS M5 & M6 platforms.

Work Experience

Working in “Cisco system pvt ltd “ as Software Engineer 3 from Jan 2019 to Present in Cisco Security Firewall Platform Team.

Worked as a “Senior Software Development Engineer” in Infinera India Pvt Ltd Optical Line System Lab from May 2017 to December 2018.

Worked as “Designer – 1 ” in Hewlett Packard Enterprise Communication and Media (CMS) Labfrom June 2015 to May 2017.

Worked as “Software Engineer in Global Edge Software ltd, Bangalore Platform and Multimedia group from July 2013 to June 2015.

Professional Skill Set

In addition to my coding skills, I have been a product owner for Cisco Hardware Offload feature Agile Software Methodology.

Software Development | C | C++ | Linux System Programming | Network Security | Python | Product Ownership in Agile | IPC | Automation Framework | Multithreading

Certification

Certified ScrumMaster (CSM) from Scrum Alliance .

PROJECT DETAILS

Project Name	**Abstraction of COG to achieve minimal code change for new Line Cards.**
Organization	Infinera India Pvt Ltd
Duration	February 2018 – Present
Environment	Linux , ARM
Description	Whenever new cards were introduced for each card minimum thousand line code was written with the Abstraction framework we are achieving minimal or zero code changes in the Infra Part of common object group. Abstraction framework will help company to achieve time to market with quick software releases for each FRU . It has eliminated the testing of software from driver to application every time when new FRU should be released to market. The principle of new design is to use configuration file at runtime to create and equate the Expressions using Expression TK third party Library rather than hard coding modules for each FRU objects.
RESPONSIBILITIES	▪ Development of Performance Monitor (PM) Module. ▪ Development of PM Parser for JSON Configuration File. ▪ Unit testing

Project Name	**INFRA of L-band cards**
Organization	Infinera India Pvt Ltd
Duration	June 2017 – January 2018
Environment	Linux, ARM
Description	Software part of Optical Line card have 3 software blocks MO,CO & RO. CO is further divided into Infra and Control loops. Co interacts with the drivers(Ro) using CIL/HAl, Infra is responsible for handling these interface. Infra Handles the equipment, system, line and system side TP tables, information modelling, updating the Object group of each terminating points performance and behaviour, acts as fault representative and handler and represent service and fault LED's on the particular board.
RESPONSIBILITIES	▪ Development of Infra ▪ Unit testing

Project Name	**Configuration Interface between Virtual Network Function(VNF) and Element manager(SWA4) In a NFV**
Organization	Hewlett Packard Enterprise
Duration	March 2017 – May 2017
Team size	8
Environment	Linux/NFVI
Description	SWA-4 interface between the Element Manager (EM) and the I-HSS Virtual Network Function (VNF) is intended to provide operations to perform VNF configuration and control of VNF operations. The SWA-4 interface will provide read/write access by the EM to SSC(Subsystem Control) data along with subscription and notification of changes to supported object values. The NETCONF interface will leverage a Cluster SubSystem Control (CSSC) package allowing access to SSC objects from any Realm in theVNF and enabling configuration and control of any VNFC from any other VNFC.
RESPONSIBILITIES	▪ Coding / Development / Debugging ▪ Design of Dynamic logic

Project Name	**V-POC and EPS HSS Gr Profile Data Sharing**
Organization	Hewlett Packard Enterprise
Duration	April 2016 – March 2017
Team size	12
Environment	Linux
Description	This feature makes it possible for, using data stored in the DIT, the I-HSS to perform MAP Gr interface message processing on behalf of subscribers with 'Third Generation (3G) only'/General Packet Radio Service (GPRS) subscriptions. As a result, the customer may provision GPRS subscriber data in a single, shared network element (the I-HSS), and share the data across functional areas that support mobility management for the Packet Switched (PS) domain.
RESPONSIBILITIES	▪ Coding / Development / Debugging ▪ Functional Testing Scripts modification ▪ Leading the Nightly results monitoring for this project

Project Name	**I-HSS Subscriber Audit**
Organization	Hewlett Packard Enterprise
Duration	November 2015 – March 2016
Team size	9
Environment	Linux
Description	This feature will deliver "I-HSS Subscriber Audit" tool based on fast scanning technology available as part of SCOL framework. SCOL framework provides parallelism for data scanning. The framework is composed of two broad class of functionalities – Data Scanner and Data Analyser. This enables significant operational improvements for the subsystem allowing the steps to be executed and modified as necessary to meet the customer's operational environment.
RESPONSIBILITIES	▪ Development & Functional testing of EPS mode.

Project Name	**IHSS DBAudit tool – CSV Report for GSM and EPS modes**
Organization	Hewlett Packard Enterprise
Duration	Aug 2015 – Sep 2015
Team size	4
Environment	Linux , NSK
Description	DBAudit tool generates was generating a report which has multiple columns and an each inconsistent record is reported using multiple lines/rows. Where there are thousands of broken records, the decoding of the report becomes difficult. The DBAudit tool was enhanced to generate report in CSV format (Comma separated Values) in addition to existing report format. This new format can be controlled by a REPORT-FORMAT flag which is allowed to take CONVENTIONAL or CSV as valid values whereas the default value is CONVENTIONAL. This CSV support is developed for GSM and EPS mode of audit.
RESPONSIBILITIES	▪ Development of EPS mode.

Project Name	**Platform and Software support for INTEL MOBILE COMMUNICATION Linux Open OS Team**
Organization	Intel Mobile Communication (Contingent Worker)
Duration	April 2015 – June 2015
Team size	5
Environment / Technology	Linux
Description	The project involves providing support for clien t's range of products in Intel based Mobile & Router. It involves feature enhancement, bug fixing, information gathering, adding new feature, etc. for application and platform related components on Linux. Integrating/Migrating changes from older platforms to new one. These products are based on Intel Sofia based SOC.
RESPONSIBILITIES	▪ Development and Bug Fixing. ▪ First level analysis of the Linux issues & braking it down to module level. ▪ Implementing Ioctl call in the framebuffer driver

Project Name	**Audio over IP**
Organization	Global Edge Software Ltd
Duration	Nov 2014 – Feb 2015
Team size	2
Environment	Linux, ARM Toolchain
Description	The Audio over IP project is the idea to play audio which is send from one system and play it through streaming the audio in another system in the network. In this project audio data sent through an application via direct sound framework to virtual audio driver which in turn instead of sending the data to speakers or any audio playing device send it to the remote system using kernel sockets. On the remote side client will be running a playback application which will receive the data and play back in the system.
RESPONSIBILITIES	▪ Development of virtual audio driver and kernel socket programming.

Project Name	**MACB Ethernet controller Driver on SPEAR 600**
Organization	Global Edge Software Ltd
Duration	Jul 2014 – Oct 2014
Team size	2
Environment	Linux , ARM toolchain
Description	MACB is a 10M/100M Ethernet controller, with an SMII(Serial MII) Interface to an external PHY. The MACB driver interfaces to the kernel via net_device data structure. The structure fields are initialized to provide the necessary interface . Implemented Ethernet MACB controller for SPEAR 600 keeping reference of the existing code in MACB controller for SPEAR 320.
RESPONSIBILITIES	▪ Porting of MACB controller Ethernet driver to SPEAR 600

Project Name	**Frame work porting**
Organization	Global Edge Software Ltd
Duration	May 2014 – June 2014
Description	The test cases existing on old framework "MotionSense" need to be migrated to new framework "InvenTest". The new framework is very generic. In new framework every new product can be tested without any modification to the test cases.
RESPONSIBILITIES	▪ Migrating the test cases from old framework to new framework.

EDUCATIONAL DETAILS

B.E in Electronics & Communication with 63.25% ,2012
Adichunchanagiri Institute of Technology, Chikmagalur,

Diploma in Electronics & Communication with 74.5%, 2009
Vidya Vikas Educational Trust, Mysore

SSLC with 74.6%, 2006
ST.Joseph's High school, Hassan

Courses

- Advance Embedded Training in Emertxe Information Technologies Pvt Ltd.
- C Programming course from NIIT.

Training Attended	**Global Edge Software Ltd Training Program**
Duration	6 months
Topics	C and Data Structure Software Engineering ,UNIX programming and Internals Linux Device Drivers ,Multi threading Networking [TCP/IP protocol suite]Socket Programming Knowledge on Various Unix commands and System Calls Personality Development [Self Awareness, Time Management, Team Work]