**NAVAL KUMAR KASHYAP**

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**Professional Summary**

* Currently pursuing Master in Computing and Software Systems
* Worked as a Software/QA Engineer in Cisco’s 4G core network element MME
* Worked on LTE, IMS, 3G/2G (eUTRAN/UTRAN/GERAN)
* Worked on System integration testing and End-to-End testing for VoLTE.
* Experience in routing protocols (OSPF, RIP and EIGRP).
* CCNA trained by Cisco Academy.
* Test case development for feature testing.
* Experience in Agile Software Development Life Cycle
* Development of automation framework for in-house tools using Python
* Worked on Automation of system status/alarm handling.
* Participated customer demos and Lab trials.
* In-Depth understanding of Customer (Vodafone-Germany) Network and involved in reproducing issues and testing the solutions in laboratory environment.

**Work Experience**

Total Experience: 7 years

Organization: Cisco System Inc.

Designation: Software/QA Engineer II

Period of Employment: 4 years

Organization: Nokia Siemens Networks

Designation: R&D Engineer

Period of Employment: 3 years

**Educational Qualification**

**Master of Science in Computing and Software Systems** (Autumn’2015 - Current)

University of Washington

Grade: 3.5

**Bachelor of Technology in Electronics & Telecommunication** (2004 - 2008)

University: GGSIP University affiliated to ACITE, India

**Technical Skills**

**Languages:** C/C++, Java, Python scripting

**Products:** Cisco MME/S-PGW (ASR5K), Flexi NS (NSN MME), Flexi NG (NSN SGW/PGW)

**Operating Systems:** Linux (Red Hat, Ubuntu), Windows versions and Mac OS

**Hardware Platform:** Cisco ASR5000/5500, Cisco 3950 ISR, Cisco Catalyst 3750, ATCA, Dx200

**Tools Used:** Wireshark Analyzer, Nethawk, Monitor Protocol, Lattice, Mobile Call Generator (MCG), Bugzilla, Jira, CDETS

**Telecom Domain:** Understanding of LTE/SAE, 3GPP Standards, EUTRAN and UMTS/GSM

**Protocols:** TCP/IP, SCTP and Routing Protocols (RIP, OSPF, EIGRP) and 3GPP standardized protocols

**Projects**

* **Stress Detection, Recognition & Relief**Brief Description:   
  Currently working on a project to build a complete solution that helps the people to detect their psychological and physiological condition of the stress level and suggest them a variety of different ways to alleviate stress based on their interests. In this project heart rate sensor, GSR sensor and pedometer are used to record various human conditions which can detect if a person is in stress. A mobile application will be used to connect to wearable device which gathers the data and upload it to a cloud based system (AWS) for analysis and determines the stress level. Machine learning algorithms will be used for data analysis and finding patterns to create a profile for each single individual that can help to increase the accuracy of stress recognition.
* **Cloud Computing of Java/Python Codes - A multi-tier server solution**   
  Technologies: Java Beans/Servlet & Java RMI   
  Brief Description:   
  A private cloud computing system that focuses on providing online compliers that ease the naïve programmers by avoiding the installation of many compliers/interpreter like Java/Python on their local machines. Using this system, one can upload their code into a front-end web browser to send it to Servlet/Java Bean server which acts as a middleware. A cluster server configuration is used in back-end for load balancing and distribution of jobs. Middleware server selects a back-end server and passes the job using Java RMI to compile/run this program. Once job is done, results for program execution is posted back to wen interface of client user.

**Professional Experience**

**Product Development of Cisco MME**

**Duration:** July 2011 to August 2015

**Role:** Software/QA Engineer II

**Job Description:**

* Worked in development of **CISCO MME** where my responsibility was to develop new features and enhancements. I have experience in root cause analysis of bugs/defects found from real-time networks.
* Using agile methodology, the focus was to quickly provide solutions to customers. I worked on specific requests coming from customers, to test the functional behavior which are critical for their businesses.
* Write Test strategy and test cases with high focus on deploy quality products. Creation and Validation of the Software Functional Specifications.
* Worked in the development of in-housing testing tools like Lattice/LPS which are based on Python and C. These tools are used to simulate entities which can interact with developing products for their testing. These messages are based on 3GPP standards and uses protocols like GTP, TCP/IP or SCTP.
* Deep dived in creating automation framework using Python/TCL which helped the testing team to run test cases automatically and hence reducing their efforts.

**LTE/IMS End-to-End Testing at NSN**:

Centralized global team for creating and testing of under developing products with real network environment inside lab.

**Duration:** August 2008 to July 2011

**Role:** Research and Development Engineer

**Job Description:**

* Responsible for the setup of LTE/IMS network for the customer demo and trails
* Proof of concept and Inter-Operability testing for various vendors with NSN products like MME and eNodeB
* Worked on end-to-end LTE environment. Testing of NSN Flexi NS (MME) with other network elements on interfaces
* Knowledge of Layer 2 and 3 protocols like RRC, RLC/MAC

**Achievements**

* Outstanding Performer in Nokia Networks for my contribution to bring up the 4G network in SRN lab and performing exceptionally well from my role.
* Set up internal LTE lab for validation and system verification for a full fledge VoLTE solution involving MME/S-PGW, eNodeB and ISP (Media Servers).
* Won “Spot Award” for success of first ever TD-LTE call on 2.3 GHz using commercially available hardware across the world in a Media Event, which was highly appreciated by customers and higher management.