ANEESH KHER

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EDUCATION

Raleigh, NC **North Carolina State University** **Fall 2014 – May 2016**

Master of Science in Computer Science, May 2016 (Expected). GPA: 3.44

Relevant coursework: Design and Analysis of Algorithms, Advanced Data Structures, Operating Systems, DevOps, Database Management Systems, Internet Protocols, Object Oriented Design and Development, Software Engineering, Computer Networks.

Pune, India **University of Pune** **Fall 2008 – May 2012**

Bachelor of Engineering in Electronics and Telecommunication Engineering, May 2012.

Relevant coursework: Data Structures, Computer Architecture, Microcontrollers and Applications, Mobile Communication.

TECHNICAL SKILLS

- **Programming:** C, Perl, Java, TCL/Expect.
  Familiar with: Python, JavaScript, MySQL, Shell Scripting, HTML.
- **Operating Systems:** Linux, Windows, VMware ESX Hypervisor.
- **Software Tools and Networking:**
  - Node.js, Express.js, Cisco Nexus 1000v, Cisco VSG, Socket Programming, Cisco PNSC.
  - SCM and Bug tracking: Git, ClearQuest, JIRA, ClearCase.
  - Test Automation: Mocha, ATS AutoEasy.
  - Configuration and Infrastructure: Docker, Puppet, Ansible, Jenkins, AWS, Vagrant, DigitalOcean, VMware vSphere.
  - Miscellaneous: Redis, Vim, Eclipse IDE, GDB, Screen.

WORK EXPERIENCE

Technical Intern **Broadcom Corporation** **Summer, 2015 – Present**

- Developed a Perl module to interact with the internal JIRA server to create, retrieve, and edit issues.
- Wrote stored procedures in SQL which improved memory metric information retrieval.
- Fixed CI Perl and HTML scripts for better and more informative display of metrics.
- Wrote scripts to parse log files and generate CSV files from the parsed data, giving better memory metric information.
- Fixed issues in internal switch tool, resulting in a more robust framework for querying switches.

Software Engineer **GS Lab Pvt. Ltd.** **July, 2012 – June, 2014**

- Developed an automation tool in Perl which improved test coverage by more than 400%. The tool also improved coverage by covering more network attribute combinations of IP Address, port number, protocol etc.
- Improved test coverage by adding test scenarios (multiple conditions in one firewall rule, multiple rules under one policy)
- Fixed and maintained over 20K lines of existing virtual infrastructure automation code on a continuous basis.
- Contributed to manual testing of some switch features – VXLAN, ACL, QoS, FTP, TFTP, and RSH. Reported critical issues to the customer and provided support for verifying bug fixes.
- Resolved many virtual network configuration issues and trained new employees in understanding the product.

ACADEMIC PROJECTS

- **DevOps Pipeline**
  Developed an end to end software delivery pipeline which included the three prime stages of a software project – Build, Test, and Deployment. We configured Jenkins, Git for the build process. We used Mocha, Istanbul and developed a tool in JavaScript to improve code coverage to 100%. For deployment, we developed a tool in JavaScript to automatically provision machines on AWS EC2 and configure them using Ansible. We demonstrated a canary build using Redis and http-proxy.
- **University Housing Application**
  Developed a database application using Oracle10g and Java to allow students to register for various housing/parking options, on and off campus. Developed the modules using Java which interacts with the database using JDBC with embedded SQL queries. Wrote stored procedures for dynamic generation of invoices for each registered user and for roommate matching functionality.
- **RAM File System**
  Developed an in-memory file system in C using the FUSE API. Designed the tree structure for the file system, which could perform all operations in O(n) time with respect to number of files. Implemented user level functions for each of the basic system calls like open, close, read, write etc. Tested using Postmark Benchmark.