ANEESH KHER

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WORK EXPERIENCE

MTS 2 – Software Engineer **Hughes Network Systems LLC** **July 2016 – Present**
- Currently developing a feature to support over-the-air update of configuration files on VSAT.
- Worked on fixing bugs in user and kernel space related to VSAT web UI and networking capabilities.

Technical Intern **Broadcom Corporation** **June 2015 – May 2016**
- Migrated existing CI scripts from ClearQuest APIs to use new JIRA APIs.
- Developed a file dependency graph generation tool which maps all the calling files to the called scripts in a directory.
- Developed a Perl module to interact with the internal JIRA server using REST services to create, retrieve, and edit issues.
- Wrote scripts to parse log files and generate CSV files from the parsed data, giving better memory metric information.

Software Engineer **GS Lab Pvt. Ltd.** **July 2012 – June 2014**
- Developed an automation tool which improved network firewall test coverage four fold.
- Fixed and maintained the existing virtual infrastructure automation code on a continuous basis.
- Developed utilities to automate common user tasks – Environment configuration, SSH Authentication etc.

EDUCATION

Raleigh, NC **North Carolina State University** **August 2014 – May 2016**
Master of Science in Computer Science.
Coursework: Algorithms, Operating Systems, DevOps, Cloud Computing, Data Structures, DBMS, Computer Networks.

Pune, India **University of Pune** **August 2008 – May 2012**
Bachelor of Engineering in Electronics and Telecommunication Engineering.

ACADEMIC PROJECTS

- **RAM File System** (C Programming)
  Basic file system in memory using the FUSE library. Implemented user level functions for each of the basic system calls like open, close, read, write, etc. Tested using Postmark Benchmark.
- **OpenStack Automation** (Ubuntu, Shell Script. Team of five)
  Developed a script to successfully install the OpenStack two-node installation on Ubuntu 14.04.
- **Simple FTP using Go-Back-N ARQ** (Java. Team of two)
  Developed a simple file transfer application. Implemented *reliable* file transfer with UDP packets using the Go-Back-N ARQ protocol. Used threads for retransmission timer and for resending lost packets.
- **Non Preemptive Thread Library** (C Programming)
  Developed a non-preemptive threading library in C using context based system calls (`setcontext`, `getcontext`, `makecontext`, `swapcontext`) which supported *create*, *yield*, *join*, and *exit* actions on any thread.
- **University Housing Application** (Java, SQL. Team of four)
  Database application which allows students to register for housing and parking options. Write stored procedures for dynamic generation of invoices for each registered user and for roommate matching functionality.
- **Advanced Data Structures** (C Programming)
  - Disk based merge sort using basic merge, multistep merge, and replacement selection merge.
  - Created a B-Tree supporting search and insert. Made it persistent by storing it on disk after program termination.
- **DevOps Software Delivery Pipeline** (Various technologies. Team of three)
  End to end software delivery pipeline demonstrating *Build*, *Test and Analysis*, and *Deployment*. Configured *Jenkins* and *git hooks* for build. Used *Mocha*-js and *Istanbul*-js for unit testing and analysis. Developed a sample web application with *Express.js* for deployment. Developed system health check tools and used *Redis* feature flags with *http-proxy* for canary release.

TECHNICAL SKILLS

- **Programming:** C, Perl, Java. Familiar with: JavaScript, HTML, CSS, MySQL, Shell Scripting, TCL/Expect.
- Node.js, Express.js, Cisco Nexus 1000v, Cisco VSG, Cisco VEM, Cisco PNSC.
- Configuration and Infrastructure: Docker, Puppet, Ansible, Jenkins, AWS, Vagrant, DigitalOcean, VMware vSphere
- Git, Vim, Eclipse IDE, GDB, GNU Screen, JIRA, ClearCase, Redis, Mocha-js, ATS AutoEasy.