

Education:**The University of Texas at Dallas**

Aug'14-Dec'16

Master of Science (M.S.) in Computer Science

Punjab Technical University

Aug'10-Jul'14

Bachelor of Engineering (B.E.) in Computer Science & Engineering

Work Experience**Full-stack Developer Intern(InfoSec)** (*Angular, Node, Python*) *Walmart Labs, Sunnyvale*

Jun'16-Dec'16

- Creating web services for web applications and add reminder email features as cron jobs.
- Modified the Front-End to add new features and improved the UI.
- Triggering and parsing Jenkins config.xml files to create a PostgreSQL database inventory for jobs and related info.
- Multithreaded python scripts to collect ownership information from GitHub.
- Scored the maximum points for the intern-one hackathon during the first stage of the competition. Built a prototype android for the navigation and shortest distance in the Walmart stores (team-of-five).

Dev-Tools/Software Intern (*Python, Ansible and Bash*)*Copart Inc, Dallas*

May'15-Jan'16

- Bash FTP scripts for BTB clients (Samba server). Init scripts to manage the startup of applications.
- Python scripts to manage the logs and collectors on production servers on a centralized database.
- Web-pages to monitor health of resin and tomcat applications.

Mobile Engineer (Android, SQLite)*Oneinfonet Private Limited, India*

Jan'14-Aug'14

- Built an Android App focused on to increase the 'women security' to eliminate molestation cases. This project used Java and SQLite on the Android Platform to send emergency messages.

Trainee Programmer (C#, HTML, CSS, MySQL)*Web1technologies Private Limited, India*

May-Jun'12

- Developed modules and stored procedures for an online car rental site using ASP.NET as the front end and MySQL database as the back end.

Certifications/Training:

- RHCE (Red Hat Certified Engineer), RHCSA (Red Hat Certified Administrator) Jan'14
- Statement of Accomplishment in Computer Networks course (Coursera) and CCNA (training). Oct'13

Technical Skills:

- **Languages:** Java, Scala, Python, Bash, C, C++
- **Web Stack:** HTML5, CSS, JavaScript, jQuery, AngularJs, Node.js, Flask
- **Operating Systems:** CentOS, Free BSD, Windows
- **Databases:** MongoDB, MySQL, Postgres, Cassandra
- **Frameworks** Hadoop, PySpark, OpenCV

Related Coursework:

Algorithm Design and Analysis	Implementation of Data Structures	Object Oriented Analysis and Design
Cloud Computing	Compiler Construction	Big Data Management and Analytics
Database Design	Video Analytics	Distributed Systems

Projects:**Distributed Systems Framework** (Java and Bash / TCP and SCTP):

Aug-Dec'16

Implemented message passing framework in JAVA using multi-threading and Maekawa's Quorum based Mutex protocol to avoid deadlocks.

Toy Language Compiler (*C and C++*)

Jan-Apr'16

Used flex and yacc (bison) to make three phases of compiler including tokenizing, AST generation for the language and machine code generation for a toy-language.

Implementation of Algorithms & Data-Structures (*Java*)

Jan-Apr'15

Implemented Skip Lists, Amazon Market Place (with careful usage in-built data-structures for optimization), Indexed Priority Queues using Prim's algorithm, finding critical paths in PERT graphs & dynamic programming solution for Tug-of-war problem.

Resource Virtualization (*Python, Bash, Virsh*):

Sep-Dec'14

KVM creation using Virsh, simulated Google workload by parsing the Google cluster data for the guest machines using Python, monitored the workload and algorithm that dynamically migrates the VM based on the monitoring statistics.

Connection between cloud and clients and syncing data (*Java*)

Sep-Dec'14

Developed an android app to initiate connections with the Amazon Web Services (AWS) and synchronizing data between the laptop, mobile and the EC2 (server) instance, using socket programming in Java.

UTD Comet Cruiser (*Java, Python, Flask*):

Aug-Dec'14

Implemented a UTD shuttle tracking android application, posting the co-ordinates of bus on the server (flask) periodically and the client fetching the co-ordinates of the server when required. Used Object Oriented GRASP patterns in the app for adding new routes.