

Reliance Jio Infocomm

Cloud Engineer

Bangalore, India
April 2014 to Present

- Involved in evaluating, contributing and modifying Openstack components to meet Jio’s needs.
- **Upstream contribution**
 - Implemented caching layer in identity, assignment components of Keystone and thus reducing calls to database.
 - Implemented role based access control in MagnetoDB.
 - Integrated Ceilometer with MagnetoDB for metering purpose.
 - Bug fixes in Keystone, MagnetoDB. Few in Tempest, Glance etc.
 - Code reviews in Glance, MagnetoDB, Keystone.
- **Contributions which are not in upstream**
 - A POC which involved replacing MySql with a distributed database (MagnetoDB, Cassandra) as a backend for Keystone. The aim of this project was to eliminate single point of failure and lack of scaling out option with MySql. It also offered cross region replication which is beneficial in running multi-region cloud deployment. There is a spec under review for this.
 - Configuring and managing Keystone service as a part of Identity management team. That involves defining apis, setting RBAC policies and having tenant isolation among different tenants.
 - Tempest tests to test Keystone apis since the Keystone tests in Tempest don’t work with domain scoped token.

Morgan Stanely Advantage Services

Analyst

Mumbai, India
Sep 2013 to March 2014

- Developed an application to crunch data from the in-house in-memory database and present it with Ext JS.

Google Summer Of Code

Student Developer

Remote
May 2013 to Aug 2013

- Improved replication policy in Drizzle database. Implemented a facility to wait for an event on table. That way, slaves subscribe to events on master and get notified of the events happening on the master. Finally changed slave code to use this and do event-based replication instead of polling.

Internship at Microsoft

Student intern

Hyderabad, India
May 2012 to July 2012

- Developed a tool to generate sql script after grouping and efficient encoding columns of an excel sheet.

Other Projects

- **Page rank algorithm:** Implemented scalable version of page rank algorithm with input as webgraph from Google programming contest 2002.
- **Membership protocol:** Implemented the gossip membership protocol which updates membership list at each node when new nodes join or nodes leave.
- **Mini distributed database:** Built upon the membership protocol project and wrote a in memory database of Cassandra style with consistent hashing.
- **Mini relational database:** Parsed a small subset of sql language and implemented simple database queries on tables stored in text files.
- **Movie recommender system:** Implemented a movie recommender system using algorithms like k-means, collaborative filtering, k-nearest neighbours on a dataset collected from facebook friends.

TECHNICAL SKILLS

Python, C++, Go-lang, MySql, Cassandra, DynamoDB, Linux, Shell scripting, Puppet, Vagrant, TCP/IP SDN Fundamentals, Rest apis, Distributed system.

EDUCATION & TRAINING

Indian Institute of Technology Hyderabad

Bachelor in Computer Science and Engineering with cgpa of 8.3

August 2009 to May 2013

Mining Massive Datasets – Coursera – grade : 94.9%

Feb 2015 to March 2015

Cloud Computing Concepts – Coursera – grade : 89%

Feb 2015 to March 2015

Cloud Computing Concepts: Part 2 – Coursera – grade : 99%

March 2015 to April 2015

ACHIEVEMENTS AND MISC

- Secured a rank of 2035 in IIT- JEE 2009 and 1008 in AIEEE.
- Scholarship by IITH and sponsorship for Industrial visit by JICA for good academic performance.
- Talks in Openstack meetups.
- Ping pong and carrom master.