

Education

Indian Institute of Technology Bombay

Master of Technology in Computer Science and Engineering - 8.42 CPA [May'17]

Savitribai Phule Pune University

Bachelor of Engineering in Information Technology - 60.0 % [May'14]

Employment

Dataxu Inc.

Software Engineer

[July'17-Present]

- Responsible for designing, developing and maintaining CI/CD infrastructure
- Built and maintained highly available Artifactory and container scanning infrastructure
- Designed and developed automation for streamlined provisioning of spot instances to reduce the cost of operating workloads in AWS
- Worked on AWS tagging to monitor cloud spend across different projects and teams
- Developed deployment and infrastructure automation to reduce all forms of manual effort
- Administration and maintenance of the source code management tool; GitHub
- Worked closely with development teams to provide support for build and deployments
- Worked on various AWS technology such as EC2, ECS, CF, API Gateway, Lambda, IAM, RDS etc
- **Technology:** Jenkins, Ansible, Git, Docker, Artifactory, Anchore, Golang, Python, Groovy, Bash

Projects

Adaptive Log Analysis for Security Assurance

M. Tech Thesis

- Explored how to combine techniques from declarative policy based languages used for network management and anomaly detection using machine learning techniques to proactively adapt to patterns detected in the logs
- Demonstrate the usefulness of this by building a prototype suitable for environments like the campus network of IIT Bombay
- **Technology:** Elasticsearch, Logstash, Kibana, Beats and Django

RAFT Enabled Distributed File Server

Advanced Distributed Computing - Engineering a Cloud

- Implemented a highly concurrent file server in **Golang**
- Made the file server fault-tolerant by replicating it using the Raft consensus protocol
- A system of five servers behaves as one transparently, and can survive node failures as long as a majority is functional

Zero Knowledge Password Proof Authentication

Advanced Network Security and Cryptography

- Implemented zero knowledge authentication mechanism in client server architecture
- Studied various authentication mechanism and possible attacks on them
- Used Elliptic Curve Cryptography to implement zero knowledge password proofs
- **Technology:** Golang, Javascript, HTML, LevelDB

Hand Gesture Recognition for Human Computer Interaction

Foundation of Machine Learning

- Implemented different machine learning based classification techniques for classifying images
- Evaluated performances of various implemented classifiers
- **Technology:** InceptionV3, VGG16, ResNet50, Logistic Regression, SVM

Android Application to Transfer Data Using Sound Waves

Advanced Wireless Network

- Developed an Android application to send and receive data using sound waves
- Amplitude-shift keying (On-Off Keying) modulation was used to represent the digital data