

Akshat Mahajan

akshatm.bkk@gmail.com

(infrastructure & systems)

akshatm.com

EXPERIENCE

PlanGrid → Autodesk (acquisition)

DevOps/Infrastructure Engineer

San Francisco, CA

9/2017 - 7/2019

- Developed and operated self-hosted Kubernetes clusters; managed networking, routing and platform reliability for over 100+ services on ~ 50 AWS nodes
- Contributor to Netflix's Spinnaker - **refactored** Netflix's Spinnaker monitoring and shipped custom Datadog tags as first-class feature
- Implemented a 97.9% improvement in RTO/RPO of multi-TB Postgres databases through architecture overhaul
- Built infrastructure-as-a-service with Salt, Cloudformation and Terraform; undertook VPC design and Postgres load balancing for new Australia datacenter
- Automation tooling development with Python, Docker, bash e.g. network circuit breakers, DNS failover with healthchecks, diff generation for production changes.

BrightEdge Technologies

DevOps Engineer

San Mateo, CA

7/2016 - 9/2017

- Sole maintainer of distributed data ingestion pipeline on HDFS/Hbase; generated individual SEO recommendations for 30-40 million URLs weekly.
- Improved monitoring tooling latency by 96% after implementing priority queuing that "remembers" slow queries and diverts them to specialised channels.
- Quintupled network throughput (200 MB/s → 1 GB/s) by implementing Thrift serialization for Python code talking to Hbase over fixed bandwidth cables.
- Built out AWS fallback nodes for data pipelines colocated in physical datacenters + staging environment from scratch for monolithic data services.
- Implemented pre-commit linting, test runner execution and Redux-based caching web components for React developers.

DataWeave Software Pvt. Ltd.

Intern - Data Semantics and Engineering

Bangalore, India

6/2015 - 9/2015

- Natural language processing over millions of short texts at a B2B corporation delivering business insights from public web-scale data.
- Designed and implemented a flexible and modular document clustering system for short texts using Google library Word2Vec and Python.

PERSONAL PROJECTS

Open Source

CHR, a pure-Python consistent hash ring implementation designed for pedagogical purposes, implemented completely from scratch with no advanced builtins.

zabr (*work in progress*), an implementation of Zookeeper's ZAB consensus protocol in Rust as a consumable library.

caprice, a Go client for RANDOM.org's API, capable of generating truly random non-deterministic data for cryptographic purposes.

wildcard-import-fixer, a command-line refactoring utility to automatically find and fix wildcard imports from Python code

More projects available at <https://github.com/AkshatM>

EDUCATION

University of California, Los Angeles (UCLA)

Bachelor of Science, Physics,
cum Laude with College Honours

Los Angeles, CA

July 2012 - June 2016

DISTINCTIONS

Top Writer 2016 and 2017, [Quora](#)

2016-2017

6K+ Reputation, [Stack Overflow](#)

2016-Present

2015 Sharpe Fellow, University of California, Los Angeles

October 2014

NASA Planetary Data System Fellowship, NASA/UCLA

2013-2015