

## Experience

### Senior Software Engineer Software Consultant

Zivame

Aug 2018 - Jul 2019  
Aug 2019 - Present

- Designed and deployed auto-scaling for web servers, reducing deployment time from 120 minutes to **1 minute**
- Rightsized server capacity and services, resulting in reduction of AWS monthly cost by **20%**
- Configured nginx for A/B testing to support dynamic bucket ratios of users across device platforms
- Optimized nginx caching to reduce static API's latency from 0.15s to **0.001s** and Redis caching load by **30%**
- Identified a network bottleneck in the caching layer and implemented a primary-replica system that scales horizontally, reducing overall average API latency from 1s to **0.15s**
- Enabled proactive business responses to financial metrics, conversion drops and API errors through an interactive real-time dashboard built on Elastic Stack (Kibana, ElasticSearch, Logstash)
- Analysed web requests and implemented rate limiting through Cloudflare service to block brute force attacks

### Software Engineer

TenTenTen Digital Products

Oct 2014 - Jun 2018

- Designed and built core features in nascent stages of a fantasy gaming application, serving **120,000** concurrent users
- Built console based monitoring tools for production servers to track metrics such as CPU and memory, resulting in holistic view of infrastructure
- Led migration of code base from jQuery to AngularJS, cutting development and maintenance time by **2x**
- Locally enhanced web2py framework (2.3.2) to handle session DB writes more efficiently, enabling the system to serve **100,000** concurrent users instead of 60,000 users
- Built a multiprocessor producer-consumer framework that scaled to handle the process of sending emails with priority mechanism achieving outgoing rate of **100+** emails/second
- Investigated and configured kernel parameters to increase the average number of web requests from 2k to **2.5k**
- Configured and performed distributed load-testing using Locust Python framework to identify bottlenecks before exposing the system to **120,000** concurrent real users at peak time

## Languages and Technologies

- Languages - Python, Javascript, Shell, HTML, CSS, PHP, Java
- Frameworks - NodeJS, Flask, Django, AngularJS
- Databases - MySQL, Redis, MongoDB
- Cloud Services - Amazon AWS (EC2, RDS, S3, VPC, R53, SES, SQS, SNS, ElasticCache, CloudWatch), SpotInst, Cloudflare
- Technologies - ELK Stack, Jenkins, Nginx, Uwsgi

## Education

Sacramento, CA

California State University, Sacramento

Aug 2019 - May 2021

- Master's in Computer Science
- Graduate Coursework: Data Models and Databases, Computer Networks, Programming Language Principles.

Bangalore, India

Ramaiah Institute of Technology

Sept 2010 - Jun 2014

- Bachelor's in Computer Science and Engineering
- Undergrad Coursework: Data Communication and Networking, Operating Systems, Unix, Databases

## Projects

- **Auth proxy layer** (2019) - Add authentication layer and proxy to unprotected apps using NodeJS
- **VoIP GSM Gateway** (2019) - Setup and configured GSM over VoIP using asterisk for Raspberry Pi
- **pfsense Router** (2019) - Configured pfsense with firewall policies, load-balancing and fail-over for multiple internet connections for a home network