

# MOHAMMED FARHAAN PATEL

SOFTWARE ENGINEER • COMPUTER ENGINEERING MAJORS AND DATA SCIENCE MINORS • SAN JOSE STATE UNIVERSITY  
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## EDUCATION

### San José State University

M.S. Computer Engineering | Specialization in Data Science | GPA: 3.5

San José, CA, USA

Aug 2019 - Present

### Pune Vidyarthi Griha's, University of Pune

B.S. Computer Engineering | Minors in Cloud Computing | VP and Secretary of CS Dept | GPA: 3.8

Nashik, IN

May 2012 - May 2017

## TECHNICAL SKILLS

- **Programming:** Python, SQL, JavaScript, jQuery, HTML, CSS, Bash
- **Databases:** MongoDB, DynamoDB, MYSQL, PostgreSQL, SQLite, Redshift
- **System Design:** Event-Driven, Micro-Services, Monolith, Caching, Horizontal/Vertical Scaling, Load-Balancing, MQ, Sharding
- **AWS Stack:** EC2, S3, Lambda, Batch, Redshift, Route53, API gateway, Cloudwatch, Athena, Glue, SNS, SQS, SES, SageMaker
- **Technology Stack:** Docker, Kubernetes, Flask, Django, Redis, RabbitMQ, Terraforms, ORM, Bootstrap, Blockchain, Elastic Search

## EXPERIENCE

### Karza Technologies

Mumbai, IN

#### SOFTWARE ENGINEER II - REST API AND CLOUD TEAM | (*Python, AWS, Bash, MongoDB*)

Apr 2018 – Aug 2019

- Designed and developed an event-driven data pipeline system using AWS Lambda, S3 and EMR for Karza's flagship product
- Responsible for managing Karza's infrastructure stack, hosting environment, database administration, and application scaling
- Built over 150 API's from publicly available government sources to perform on-the-fly background checks and fraud investigation
- Built a dashboard panel-caching API using Redis cluster for rendering user data dynamically to reduce DB calls and improve latency

### Travel-on Holidays

Aurangabad, IN

#### SOFTWARE ENGINEER - SYSTEM DESIGN & DEPLOYMENT TEAM | (*Python, JavaScript, Docker, AWS*)

May 2017-Apr 2018

- Eliminated single point of failure by creating a master-slave MongoDB cluster to replicate entire Travel-on's existing database
- Performed query optimization and implemented "MongoDB Indexing Strategy", to eliminate DB's previous downtime of 74 hours
- Built, deployed and managed Docker containers to break up monolithic app into micro services, for enhanced scalability and speed
- Designed and implemented a high-performance Logstash and ElasticSearch stack with Kibana, for processing over 1.2k API calls/sec

## INTERNSHIPS

### Global Angel Fund Inc.

San José, CA, USA

#### FULL STACK INTERN - BACKEND AND DEVOPS TEAM | (*Python, Javascript, Bash, AWS, Kafka, CI/CD*)

May 2020 - Present

- Designed and developed entire Angel Fund MVP backend solely from scratch to deployment with 99.9% uptime within 3 months
- Built admin panel dashboard with custom real-time analytics for user retention & churn using Dash, Redis, Apache Spark & Kafka
- Built a fully automated CI/CD pipeline using bitbucket and CodeDeploy on each branch for frontend, backend, ml and admin panel
- Set up and managed entire infrastructure stack of the company over AWS which included 12 scalable servers over four applications

### San Jose State University Alumni Association

San José, CA, USA

#### SOFTWARE INTERN - ALUMNI ENGAGEMENT TEAM | (*iModules, HTML, Magnet Mail*)

Oct 2019 - May 2020

- Optimized meta tags and keywords that improved the performance of "Organic Search Results" and click-through rate by 56%
- Built a cross-platform software compatible API to target 1.5 million users per month, and reduced the email bounce rate by 35%

### Travel-on Holidays

Aurangabad, IN

#### SOFTWARE ENGINEER INTERN - WEB DEVELOPMENT TEAM | (*Python, Linux, Git, AWS*)

May 2016 – Jul 2016

- Created an internal dashboard tool to view user engagement metrics, and wrote automation bots to manage user privileges and roles
- Implemented multithreading and parallel processing for improving the overall response time of a high-traffic serverless API by 63%

## FREELANCE PROJECTS

### Freelancer Software Engineer | (*Python, React, SQL, MongoDB, Flask, Django, Ajax, Terraform*)

Mumbai, IN

- Developed [AcceptMe](#), a microservice-based customer facing application, to accept incoming user request of Instagram
- Built an [Terraform Integration Platform](#) on AWS using Django to create and manage applications, environments, and migrations

## ACADEMIC RESEARCH PROJECTS

### Smart Supply Chain Infrastructure with Blockchain | *Cloud Computing*

Jan 2020 – May 2020

- Designed developed and implemented a network-based distributed blockchain system with secured smart contracts for supply chain

### Application Tracking System | *Database Design*

Aug 2019 – Dec 2019

- Built a distributed production-ready CRM system using Flask and AWS services to apply, manage and keep track of job applications

## PUBLICATION

Filed a patent on "[Robust Human Detection & Tracking using Human Model based Camera calibration](#)" with IJARIEE