

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

San José, CA, USA

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

Aug 2019 - Present

Pune Vidyarthi Griha's, University of Pune

Nashik, IN

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

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 IJARIE