

# MOHAMMED FARHAAN PATEL

SOFTWARE ENGINEER • SOFTWARE DEVELOPER • DEVOPS ENGINEER • DATA SCIENCE  
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## EDUCATION

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**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

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- **Programming:** Python, SQL, JavaScript, jQuery, HTML, CSS, Bash, Groovy
- **Databases:** MongoDB, DynamoDB, MYSQL, PostgreSQL, SQLite, Redshift
- **Technology Stack:** Flask, Django, Ajax, Git, Linux, Redis, RabbitMQ, ORM, ETL, Elasticsearch, Kafka, Selenium, Docker
- **System Design:** Event-Driven, Micro-Services, Monolith, Caching, Horizontal/Vertical Scaling, Load-Balancing, MQ, Sharding
- **DevOps Stack:** Kubernetes, Jenkins, Helm, Istio, Terraform, Prometheus, Ansible, CI/CD, Grafana, Kibana, Logstash, Spinnaker
- **AWS Stack:** EC2, S3, ECR, ECS, EKS, SNS, SQS, SES, Redshift, Lambda, Route53, CloudFormation, Athena, Glue, CodeDeploy

## EXPERIENCE

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**Karza Technologies** Mumbai, IN  
SOFTWARE ENGINEER II - REST API AND CLOUD TEAM | (Python, AWS, Bash, MongoDB) Apr 2018 – Aug 2019

- Built an automated event-driven data pipeline system using Lambda, S3, SQS and EMR, which serves 250M+ API requests/day
- Built over 150 API's from publicly available government sources to perform on-the-fly background checks and fraud investigation
- Responsible for managing Karza's cloud infrastructure stack, hosting environment, database administration, and application scaling
- 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 microservices, 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

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**Informatica** Redwood, CA, USA  
CLOUD DEVOPS INTERN - R&D ALLSIGHT DEV | (Kubernetes, CI/CD, Chaos Engineering) Oct 2020 - Present

- Created CI/CD pipelines from scratch to automate company's Platform and Landscape deployments using Jenkins and Spinnaker
- Built a script for automated and scheduled resource attack on pods in a K8s cluster using Gremlin as a part of Chaos Engineering
- Implemented a Pod Optimization script to dynamically update and patch deployments in K8s saving \$250k annually in server costs

**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%

**Global Angel Fund Inc.** San José, CA, USA  
FULL STACK INTERN - BACKEND AND DEVOPS TEAM | (Python, Javascript, Bash, Kafka, CI/CD) May 2020 - Aug 2020

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

**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%

## RESEARCH PROJECTS

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- Developed [AcceptMe](#), a microservice-based customer-facing application, to accept incoming user request of Instagram
- Built a [Terraform Integration Platform](#) on AWS using Django to create and manage applications, environments, and migrations
- Designed developed and implemented a network-based distributed [Blockchain System](#) with secured smart contracts for supply chain
- Built a distributed production-ready [CRM System](#) using Flask and AWS services to apply, manage and keep track of job applications

## PUBLICATION

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