

AKASH RUPAPARA

"Ever Positive, Never Negative"

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Education

Master of Science in Software Engineering

San Jose State University

San Jose, CA

Jan. 2021 – Dec. 2022*

Related Coursework: Enterprise Distributed Systems, Data Mining, Enterprise Software Platforms

Bachelor of Technology in Information and Communication Technology

School of Engineering and Applied Science, Ahmedabad University

Ahmedabad, Gujarat

Aug. 2016 – May. 2020

Related Coursework: Advanced Data Structures and Algorithms, Software Engineering, Big Data Analytics

Technical Skills

Programming Languages: C/C++, Java, Python, JavaScript

Web Technologies: ReactJS, NodeJS, ExpressJS, Redux, Apache Kafka, GraphQL, Django

Databases: MongoDB, MySQL

Cloud: AWS Cloud (EC2, S3, ECS, RDS), Docker

Libraries: Pandas, NumPy, Matplotlib, Tensorflow

Experience

Software Engineering Intern

Shriji Technoaspire Pvt Ltd

Jan. 2020 – Dec. 2020

Gandhinagar, Gujarat

- Designed and developed E-commerce and content management websites for the company with capabilities of adding products to cart and completing order online by executing payment through payment gateway.
- Managed and updated timely contents on company's profile website with ReactJS, NodeJS and MySQL.

Machine Learning Intern

VNurture Technologies

June 2019 – Nov. 2019

Ahmedabad, Gujarat

- Worked on Various Machine Learning algorithms to train a Fashion Recommender Model using Tensorflow.
- Developed UI with Django and flask to get input image of a person and clothes were recommended for similar fashion as input with model trained with accuracy of approximately **90%**.

Projects

Indeed-Clone | MERN Stack, Redux, Redis, Kafka, Docker, AWS

- Developed distributed system using micro-services for job board facilitating employers, jobseeker and Admin roles.
- Implemented functionalities for job search, job application, chat, company reviews and many more.
- Implemented Redis caching to improve throughput and reduce latency. Integrated message broker (kafka) to achieve scalability and reliability of API requests.

UberEats-Clone | MERN Stack, Redux, Kafka, AWS, GraphQL [Github](#)

- Developed application using MERN Stack and implemented state management using Redux, resulting in optimized performance. Tested application using JMeter and Mocha.
- Deployed Application on EC2 instance and storing images in S3 bucket.
- Reduced the Latency by **10%** using Data-pooling option available in MongoDB to enable reuse of multi-threaded connections. Message queue is configured to create 10K user support using Kafka.

Vaccine Management System | ReactJS, Java, Spring Boot, AWS, MySQL [Github](#)

- Contributed in team to develop Vaccine Management System where user can login to book slots for vaccination and manage appointments for clinics added by the admin.
- Integrated OAuth with google with spring security for login and signup with email verification.

Smart Warehouse Management System | Javascript, C, Python, MySQL, AWS

- Designed and Integrated Arduino, Raspberry Pi and RFID Technology to build IOT Based Smart Warehouse Management System.
- Using Smart Robot to perform storage and smart parcel collection process can improve performance of warehouse operations by **40%**. Analysing and visualising performance data using Google analytics dashboard.
- Improved scalability and achieved better availability by deploying application on EC2.

Publications

Research Paper entitled “**Advanced Assistance Services Using Hybrid Ambulance System**” was presented at reputed international, Winter Simulation Conference (**h-index: 57**) at Maryland, USA and Published in **IEEE**. (ieeexplore.ieee.org/AASHA) An Algorithm was designed to minimize the average response time of ambulance to reach to the hospital from accident spot, further reducing the casualty rate. It provided an overall time reduction of approximately 3 minutes with a **97%** survival rate.