HET JAGANI

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SUMMARY

A software engineer skilled in architecting and implementing backend application systems pursuing specialization in Enterprise Software Technologies and Cloud Technologies.

EDUCATION

MS in Computer Software Engineering - San Jose State University, San Jose, California **Jan 2021 - Dec 2022**
Courses: Software Systems Engineering, Ent Distributed Systems, Ent Application Development

BTech in Information and Communication Technology - Ahmedabad University, Gujarat **Aug 2016 - May 2020**
Courses: Software Engineering, Advanced Data Structures & Algorithms, DBMS, Cloud Computing, Computer Networks

TECHNICAL SKILLS

Programming Skills	C, C++, Golang, Java, Javascript, Python, PHP, bash
Web Technologies	NodeJS, React, RESTful APIs, GraphQL
Cloud Technologies	Docker, Kubernetes, AWS, Event Queues, Serverless
Databases	MySql, Postgresql, MongoDB, Redis
Frameworks & Tools	Spring Boot, Jenkins, Git, Ansible, Github CI/CD, NatsIO

WORK EXPERIENCE

Backend Developer: Factly.in (Github) **(Jul 2020 - Jul 2021)**

- Worked on development of open source projects (in Golang) for developing Content Management System and tools for journalism and fact-checking.
- Worked with various technologies such as Golang, Python, Redis, NatsIO, Docker, GraphQL API, Redis, Ory Stack for authentication service, Gorm (ORM in Golang) with Postgresql database.

Bhaskaracharya Institute For Space Applications and Geo-Informatics (Github) **(Aug 2019 - Nov 2019)**

- Developed a general-purpose video analytics software which leveraged Machine Learning algorithms to perform video processing. The software was build in python with Tkinter framework for GUI and Darknet & Coco models for object Detection.

PROJECTS

- **B.Tech Final Year Project: Vidhyapak, Video Streaming Application**: Online education platform that was similar to Gyapak file sharing ecosystem used in our university.
  - We achieved 20% less latency using Redis for caching of API requests and Hystrix was used for handling fault tolerance for internal API requests which prevented chained failures.
  - Deployment was done initially using Docker Swarm, but later was shifted to Kubernetes Cluster on AWS EC2 which improved overall performance by about 25% due to better container networking in Kubernetes.
  - **Technologies Used:** JAVA, Spring Boot, MySQL, Docker, Kubernetes, AWS, XenServer, FreeNas.
- **Cloud Cost Calculator:**
  - Web application to calculate cost summary report of cloud resources in Amazon Web Services. The application provides list of all the resources supported by AWS. User can select resources suitable for their need and application provides weekly & monthly cost report with an option to download in PDF
  - **Technologies Used:** Angular, AWS Pricing API, Docker, Ansible, AWS, Bootstrap.
- **COVID CT Scan Diagnosis:**
  - Automated diagnosis of COVID-19 from the CT Scan image of patient's lungs using Data Mining Techniques. Here we achieved almost 10% more accuracy than base techniques used in the dataset research paper.
  - Public COVID CT images dataset is hard to find so we have combined two datasets and applied various data augmentation techniques for better performance.
  - **Technologies Used:** Python, Tensorflow, SKLearn, Numpy, ML Algorithms, PCA.
- **Automatic Toll Collection:**
  - Inspired from the current traffic fine collection system in India, an automated IOT based toll collection system was developed, which detects licence plate of vehicle and stores data about toll to be paid by the vehicle.
  - **Technologies Used:** Python, RaspberryPI, Flask, MySQL.