

Kunj Shah

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EDUCATION

California State University, Northridge

Masters of Science Cumulative GPA: 3.6/4.0.

- Major in Computer Science.
- Relevant Coursework: Data Structures and Advance Algorithms, OS, ML, Advance web, Database design and software engineering and Cloud.

Los Angeles, CA, USA
August 2021 – May 2023

MIT Art, Design, and Technology School of Engineering

Bachelor in Computer Science, Cumulative GPA: 7.19/10.0.

Pune, MH, India
August 2017 – August 2020

SVKM's Shri Bhagubhai Mafatlal Polytechnic

Diploma in Computer Science, Cumulative GPA: 8.2/10.0.

Mumbai, MH, India
August 2014 – May 2017

SKILLS

- **Languages & Databases:** Python, Typescript, Javascript, Java, C++ | MongoDB, MySQL, PostgreSQL.
- **Web Frameworks & Libraries:** NodeJS, REST APIs, GraphQL, React, Redux-Saga, Flask, Django, HTML, CSS3, Bootstrap.
- **Others:** System Design, Database Design, Git, AWS, Google Cloud, ElasticSearch, FastAi, Tensorflow, Docker, Kubernetes, Firebase, Postman, Jenkins, Jira, Sentry, FFMPEG, ROS, Microservice architecture pattern.

PROFESSIONAL EXPERIENCE

Sharper Shape

Software Engineer Intern

San Jose, USA
June 2022 – Present

- Used Python and **AWS CDK** to integrate **S3**, **SNS**, **SQS**, and **Lambda** functions and **DLQ** to trigger actions depending upon bucket events.
- Integrated Slack SDK to notify the channel about the completion of an S3 event and Lambda failure. Calculated company-based S3 usage by Amazon S3 Inventory Report.
- Developed a React interface to import and validate CSV files before uploading the file to an S3 bucket which invokes Lambda functions.
- Built CI/CD pipelines for service & underlying resources, facilitating seamless integration and release of changes.

Expertrons

Software Developer

Mumbai, India
December 2020 – May 2021

- Collaborated with a team of 6 people following **Agile Scrum** methodology to develop a mobile app using **MERN stack React Native, Redux-Saga**, and **NodeJS** for the backend Rest APIs.
- Implemented **video caching** to reduce the application's load time by **12%**. **FFMPEG video compression** resulted in a **41% reduction** in transmission bandwidth.
- Integrated **MongoDB** indexing for quicker searching and **aggregates** for complex querying.
- Involved in **AWS setup and migration**, including building **microservices** and **optimizing costs** by 10%.
- Proposed and Installed an on-premises version of Sentry for tracking bugs and issues across all platforms.

Geekwork

Backend Developer Intern

Mumbai, India
December 2019 – March 2020

- Contributed to AGV mobility and collision avoidance while working on **ROS**, **Dijkstra's algorithm**, and the **A*** algorithm for pathfinding.
- Integrated APIs such as One drive, Google Drive, and Slack.
- Designed an ETL process to extract data from cloud APIs, used Apache Tika to process the data, and stored the results in **Elastic Search**.

PROJECTS

Sign Language Detection

November 2021

- Programmed a solution that eases communication with the Deaf and Dumb by translating hand sign language to text and speech. Mediapipe for posing and configuring the baseline Long-Short Term Memory **LSTM** for ML model with 89% accuracy.

Swachh - AI-enabled citizen grievance reporting system

September 2020

- An Application that enables a user to report any grievance by clicking pictures, and the system detects the issues using PyTorch and CNN to build image classification with 91% accuracy and reports to nearby authorities depending on the user's location.

India-location-details - Open source

July 2020

- **india-location-details**- Developed an NPM package, to find details of Indian regions by zip code, cities, and states.

Automated Guided Vehicle

March 2020

- Industrial Automated guided vehicle built on **ROS** and python for logistic operations. Used ROS to create a 2d cost map using lidar sensor data.
- Gained knowledge about ROS fundamentals, working with Lidar, the publisher-subscriber model to communicate between devices and sockets.
- Used Lidar data to plot the map of the area. Used Gazebo for visualization of AGV movements.

Billing Software

July 2017

- The Billing software handles stock management, Bill generation, CRM, taking backups, notifying for overdue bills, and giving statistics.