Kunj Shah

kunjshahh9@gmail.com | (747)-206-6201 | www.kunjshah.dev | LinkedIn | Los Angeles, CA

EDUCATION

California State University, Northridge   Los Angeles, CA, USA
Masters in Computer Science, Cumulative GPA: 3.6/4.0.   August 2021 - May 2023

MIT Art, Design, and Technology School of Engineering   Pune, MH, India
Bachelors in computer science, Cumulative GPA: 8.5/10.0.   August 2017 - August 2020

PROFESSIONAL EXPERIENCE

Sharper Shape | *Software Engineer Intern | San Jose, CA, USA*   June 2022 - Present
- Used Python and **AWS CDK** to integrate **S3, SNS, SQS,** and **DLQ** and **Lambda** functions to trigger actions depending upon bucket events.
- Integrated Slack SDK to inform company's designated channel upon completion of an S3 event and Lambda failure. Utilized Amazon S3 Usage Report to calculate client based S3 usage. Integrated **Prometheus** to enable monitoring and alerting with usage data.
- Developed a React interface that enables the import of CSV files before uploading them to an S3 bucket, triggering Lambda functions.
- Built **CI/CD** pipelines for service & underlying resources, facilitating seamless integration and release of changes.

Expertrons | *Software Developer | Mumbai, MH, India*   December 2020 - May 2021
- Collaborated with an **Agile Scrum** team of 6 members in developing a mobile app using **Node.js, React, React Native, Typescript, MongoDB**
- Implemented video caching, resulting in a 12% reduction in load time, and FFMPEG for video compression, resulting in a 41% reduction in transmission bandwidth.
- Used MongoDB indexing for faster searching and **aggregates** for complex queries. Contributed to **AWS setup** and migration, including building microservices and optimizing costs by 10%.
- Proposed and installed an on-premises version of Sentry for efficient tracking of bugs and issues across all platforms.

Geekwork | *Backend Developer Intern | Mumbai, MH, 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

Drowsiness Detection Using InceptionV3 and Dlib | Python, Tensorflow, Keras, OpenCV, Image processing   November 2021
- Developed a drowsiness detection system using InceptionV3 and Dlib, achieving a 96% accuracy rate in detecting driver drowsiness. Implemented deep learning models and computer vision techniques to analyze facial features and eye movements.

Sign Language Detection | ML, LSTM, OpenCV, Mediapipe, Flask, Firestore   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 for model with 89% accuracy.

Swachh - AI-enabled citizen grievance reporting system | CNN, PyTorch, Nodejs   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 | JavaScript, Node.js   July 2020
- **india-location-details**- Developed an NPM package, to find details of Indian regions by zip code, cities, and states.

Automated Guided Vehicle | ROS, PUB-SUB   March 2020
- Developed an Automated Guided Vehicle utilizing ROS and Python for logistic operations. Created a 2D cost map using lidar sensor data.
- Acquired proficiency in ROS fundamentals, including working with Lidar, utilizing the publisher-subscriber model for device communication, and sockets. Utilized Lidar data to generate and plot maps of the area. Employed Gazebo for visualization of AGV movements.

SKILLS

- **Languages & Databases**: Python, Typescript, Javascript, Java, C++ | NoSQL, Cosmos, MongoDB, MySQL, PostgreSQL.
- **Web Frameworks & Libraries:** Node.js, REST APIs, GraphQL, React, Redux-Saga, Next JS, Flask, Django, HTML, CSS3, Bootstrap.
- **Others**: System Design, Database Design, Git, AWS, Google Cloud, ElasticSearch, Scikit-learn, Numpy, OpenCV, Matplotlib, Fastai, Tensorflow, Docker, Terraform, Kubernetes, Prometheus, Firestore, Firebase, Postman, Jenkins, Jira, Sentry, FFMPEG, ROS, Microservice architecture pattern.