

LEKHA VIJAYAKUMAR

lekhavc2711@gmail.com | <https://github.com/lekhav> | <https://linkedin.com/in/lekhav> | 669-204-6031 | San Jose, CA

Education

San Jose State University, USA

December 2018

MS Electrical Engineering

Avinashilingam University, India

May 2015

BE Electronics and Communications Engineering

Professional Experience

Hanu Innotech, Fremont CA, USA – Software Development Engineer

May 2019 – Present

- Design and Implement features to collect health records data for data Engineering. Build a chatbot using Google Dialogflow. Implement scalable web UI to consume REST endpoints over a microservice architecture using React, NodeJS, JQuery, Webpack, Babel, Highcharts, ES6 principles and other third-party API's.
- Collaborate with other developers, QA, product owner and scrum master to assess dev PR's, prioritize needs and produce required software changes and releases.
- Monitoring app/stack performance through AWS and refining our codebase to be more performant, modular, scalable and reliable without sacrificing user experience or cost.
- Regular code deployments and releases within an Agile development environment. Unit and regression testing, debugging and API defect tracing in existing applications.

Indium Software, Chennai, India – Quality Assurance Engineer

July 2015 – February 2016

- Managing Test Automation on multiple projects in parallel, ensuring QA delivery. Assisted with Unit, Integration, Functionality, Regression test suites development. Perform bug fix verification, Analyze defect trend with data from previous releases.
- Technologies: Python, Java, MySQL, Selenium, QC ALM.

Engineering Projects

HomeAway Web Application clone [HTML5, ReactJS, React Bootstrap, NodeJS, MochaJS, Kafka, PassportJS, MongoDB]

- Developed a 3-tier application to book vacation rentals where vacation rental owner can list a huge selection of vacation properties that provides the travelers to book accommodation. Enhanced performance and reliability using Kafka, Redis Cache, MongoDB sharding, RDS replication and connection pooling.

Slack Web Application clone [React, Redux, Semantic UI React, Kafka, Firebase Database and Backend Authentication]

- Developed a prototype of Slack Web Application for real time chat and file sharing. Used Kafka Producer Consumer model as a messaging queue with multiple partitions for fault tolerance. Containerized the application and hosted it on Heroku.

Image Detection Web Application [React.js, Node.js, Express.js, bcrypt, AJAX, PostgreSQL]

- Developed a web application using Clarifai API to display and filter the objects recognized in the Image using MERN stack.
- Implemented bcrypt for password Hashing, Passport.js and JWT for Authentication and User Management.

Recommendation System on IMDB movies

- Performed EDA on the dataset to analyze the correlations in metadata. Built four different Recommender Engines using various Machine Learning models: Simple Recommender, Content based, Collaborative filtering, Hybrid Engine to recommend movies.
- Preprocessed IMDB dataset with NumPy, Pandas, matplotlib, SciPy, NLTK libraries.

Video Calling Application using WebRTC [Python, X-Lite, Softphone, Asterisk, SIP, Ubuntu]

- Established Real Time Communication between peers on the same subnet by setting up STUN, TURN servers with Mediastream, RTCPeerconnection, RTCDataChannel API's.

Skills

Frontend: HTML5, CSS3, Bootstrap, JavaScript, React, Redux, Flask, Django, jQuery, AJAX, AngularJS, Web Services.

Backend: Python, Java, NodeJS, ExpressJS, Kafka, JUnit, MochaJS, Selenium, pytest, Spring Boot, REST API, SOAP, HTTP, JSON, XML.

Databases: MySQL, MongoDB, PostgreSQL, Oracle, Firebase, Microsoft SQL Server.

Deployment: Docker, Kubernetes, Git, AWS (EC2, Route53, Load Balancer, Elasticsearch), Microsoft Azure, GCP, Enterprise Distributed Systems, Wireshark, GNS3, Networking Protocols.