Harsh Agrawal

760 S 12th ST, San Jose, CA, 95112   harshagrawal007@gmail.com

669-268-4619   https://www.linkedin.com/in/harshagrawal007/

EDUCATION:

- **Master of Science** in Software Engineering   San Jose State University, San Jose, CA
- **Bachelor of Technology,** Information Technology   Rajasthan Technical University, India

TECHNICAL SKILLS

- **Languages:** JAVA, Python, JavaScript
- **Databases:** RDBMS, Aurora, MySQL, MongoDB
- **Technologies:** AWS EC2, AWS Fargate, AWS S3, AWS Lambda, GitHub, Kafka, Test Driven Development, Spring, Spring Boot, Jenkins, Redis, Junit

WORK EXPERIENCE:

Cloud Engineer, Sleep Number Labs, San Jose, CA   **Jan 2020 – Nov 2023**

Focus: Software Engineering, Architecture, Microservices, Rest API development

Technologies: Java, Python, Amazon Web Services (ECS, EC2, MSK, S3, Systems Manager, RDS, DynamoDB), Google Guice, Jersey, Spring, Grails, JUnit, Cassandra, MySQL, Docker, Kafka, Hazel Cast, Datadog, Sumo Logic

- Implemented features for Climate360 and 1080 series beds, server-side Rest APIs, DB design and implementation, Metrics collection, new Cloud flow for Device Request connection, Binary Upload/download, Manifest upload/download, Software update policies, Order related changes for new series of beds
- Designed and implemented Java based microservices, Rest APIs in Java and Groovy for new products and features
- Implemented a robust system for the graceful shutdown and startup of a microservice operating on AWS Spot instances. This solution leveraged DynamoDB and a Kafka Messaging Queue to maintain the microservice's state.
- Diligently investigated and resolved production-related issues, contributing to improved system stability and performance.

Cloud Engineering Intern Sleep Number Labs, San Jose, CA   **May 2019- Dec 2019**

Technologies: Java, Python, Amazon Web Services (ECS, EC2, S3, RDS, DynamoDB), Google Guice, Jersey, Spring, Grails, JUnit, Mockito, MySQL, Docker, Kafka, JDBC, Scala, Hazel Cast, Datadog, Sumo Logic, Agile/Scrum

- Dockerized Grails microservices, implemented a Jenkins job to make the docker image and deployed on AWS ECS
- Rest API design and development in Java and Grails APP
- Created monitoring dashboards (failure rate, success rate, total count) of several customer facing APIs on Sumo logic and Data Dog
- Implemented Continuous Development and Deployment using Jenkins, SonarQube, AWS ECR and ECS

Cognizant, India (Full Stack Developer)   **Feb 2018 -July 2018**

Technologies: AngularJS, Angular 5, Spring Boot, Java, Ajax, jQuery, Jenkins, Tomcat, Typescript, REST

- Developed product posting, review and listing, profile management and change password for Vendor and Customer portal of an e-commerce website.
- Implemented Slots booking feature for the candidates on internal portal, used for conducting tests.

DeCurtis Corporation Pvt. Ltd, India (Software Engineer Trainee)   **Nov 2017- Feb 2018**

Technologies: Kibana, Grafana, Kubernetes

- Managed and monitored running services using DevOps tools
- Production Bug Investigation and fixes.

IBM Lab, India (Summer Intern)   **May 2016 - July 2016**

Technologies: Java Enterprise Edition (J2EE), JSF, JSP, EJB, RAD 7.5, DB2 9.5, WAS 7.0

- Designed and Developed Attendance management for Human Resource Management System.
- Designed and Developed Branch, Calendar, and Staff Management features for University Management System.

ACADEMIC PROJECTS:

AI-based Electoral fraud prevention system using blockchain: **April 2020**

Technologies: React, NodeJS, Ethereum, MySQL, Solidity

- Implemented Smart contract on blockchain to store candidate information, voter information and vote counts.
- Implemented Login, Signup, Fetch and Decryption of candidate and voter information from Blockchain, Email Verification using OTP, API to connect to face recognition flask server.

Document Search tool   **December 2019**

Technologies: Python, Flask, React, Natural Language Processing

- Develop web application to convert English search query into German and then perform search in a German document and retrieve results in English, for this trained the NLP model, based on stop words and word to word translation.

LinkedIn Prototype: **December 2018**

Technologies: React, Redux, Kafka, JMeter, JWT, Passport.JS, Redis, MongoDB, Node.JS, MERN Stack

- Developed User profile management, Analytics Charts, Login, Signup, Picture upload, Resume View, User authentication.
- Load monitoring using AWS load balancer, achieved 1/5th of avg. response time by implementing **Kafka** with **Redis** SQL caching, tested using JMeter for 100-500 concurrent users.

The Walking Dead (Game using Green Foot)   **December 2018**

Technologies: Java, Design Patterns, Kanban, Greenfoot

- Developed single player Java shooting game by implementing Gang of four Objected- oriented Design Patterns like Strategy pattern, Factory pattern, Command Pattern, State Pattern, Observer pattern.
- Implemented user stories, UML Diagrams, Sprint Task Sheets, GitHub Task Board, XP values journal, scrum reports.

Will It Sell – App success Predictor   **December 2018**

Technologies: Python, Flask, React, Natural Language Processing

- Develop web application to Predict success rate of an app. For this trained the NLP model to generate the predictions and generated the graphs and charts.