

Harsh Agrawal

San Jose, CA | harshagrawal007@gmail.com | 669-268-4619 | www.linkedin.com/in/harshagrawal007/

WORK EXPERIENCE

Sleep Number Labs

San Jose, CA

Software Engineer, Cloud Services

May 2019 – Nov 2023

Focus: Software Design/Development, Microservices, Architectural Design, RESTful APIs, New Product Introduction

- Led the Design and Implementation of a new mechanism for IOT Device connections to Cloud Services, Devices Binaries Upload to cloud and download to devices, Software update policies therefore reducing **downtime by 50% for IOT devices** during software updates.
- Revamped Order Related Rest APIs for new line of product, resulting in seamless order placement experience, and **reduced response time by 30% compared to previous APIs**, troubleshoot performance and integration issues using manual testing and 100% Junit test case coverage.
- Implemented a robust system for the graceful shutdown and startup of a microservice operating on AWS Spot instances. This solution leveraged DynamoDB and Kafka Messaging Queues to maintain the microservice's state thus **reduced manual intervention by 80%**.
- Investigated and resolved production-related issues, created troubleshooting guide **contributing to improved system stability, performance, and faster turnaround time**.
- Containerized middle layer Groovy microservices using Docker, implemented a Jenkins job to create the build and docker image, deploy on AWS ECS, thus **reducing build, and deployment times by 25%**.
- Designed and implemented Java and Groovy based microservices using Spring Boot, Spring MVC, Spring IOC, Spring Batch, Spring Annotations, Spring AOP, Spring Transactions, Spring JDBC along with 100% Junit test coverage, metrics collection and dashboards on sumo logic and Datadog.
- Created and configured Continuous Development and Deployment for microservices using Jenkins, Docker, GitHub actions, SonarQube, AWS ECR and ECS.

Cognizant

Chennai, Tamil Nadu, India

Full Stack Developer

Feb 2018 - July 2018

- Designed and developed responsive web pages on front end using AngularJS, Angular 5 and Typescript, JavaScript HTML, CSS and Bootstrap. Built 100s of Restful WEB APIs using a full complement of NodeJS, Express, Angular JS, and Mongo DB to store and retrieve user data.
- Designed and developed backend applications using Spring Boot, Spring MVC, Spring Annotations, Spring Transactions, Hibernate and JDBC, and Spring beans for controlling the flow between UI and Hibernate, deployed on Tomcat.

DeCurtis Corporation

Jaipur, Rajasthan, India

Software Engineer

Jan 2017 - Feb 2018

- Created Components of the web application in Java microservice using Spring framework for the MVC architecture in application development along with Hibernate as an Object Relational Mapping tool to establish the connection with the backend database and Java objects.
- Developed Java based Microservices using Docker packaged into Amazon Web Services Elastic Kubernetes Service, AWS Elastic Container Service and EC2 instances.
- Created Dashboards for monitoring on Kibana and Grafana.

LEADERSHIP EXPERIENCE

Sleep Number Labs

San Jose, CA

Software Engineer, Cloud Services

- Supervised and managed a team of 3-4 contract engineers, facilitating debugging sessions, conducting daily scrum and standup calls, providing domain knowledge transfer, and performing thorough code reviews to ensure high-quality deliverables.
- Acted as Build Coordinator, overseeing the creation and announcement of builds, establishing timelines for merges to the main GitHub branch, and setting guidelines for maintaining a clean commit history on pull requests and merges to ensure efficient and organized development processes.

EDUCATION AND CERTIFICATIONS

- **Master of Science** in Software Engineering San Jose State University, San Jose, CA
- Bachelor of Technology, Information technology Rajasthan technical University, India
- GitHub Foundations Certification, [Credle badge issued By GitHub](#)

SKILLS

- **Languages:** JAVA, J2EE/JEE, Python, JavaScript, C++/C, Go, Bash, Typescript, ExpressJS, NodeJS, Groovy, Scala
- **Databases:** Aurora, MySQL, MongoDB, Cassandra, Redis, DynamoDB, DB2, SQL and NoSQL databases
- **Technologies/Tools:** AWS (EC2, S3, Lambda, API Gateway, Step Functions, EFS, ECS, DynamoDB, Aurora DB, IOT Core, CloudWatch, VPC, Route 53, IAM, SQS, Lambda functions, Step functions, Cognito), GitHub, Kafka, Spring, Docker, Spring Boot, Jenkins, Redis, Junit testing, Mockito, Jersey, Grails, Google Guice, Google Protobuf, Akka Actors, Apache Shiro, Sumo logic, Hazel Cast, Datadog, Relational Database Management Systems(RDBMS), React
- **Software Engineering Practices:** REST API Development, Microservices Architecture, Agile Methodologies, CI/CD Pipelines, Security Best Practices, Network Configuration, Architectural Design, Test Driven Development, Behavior Driven Development, Event-driven architecture, New Product Introduction, SDLC, Design Patterns.