Aditya Singh

Senior Software Engineer @ Oracle, Seattle

7+ years of experience in developing distributed systems with focus on improving performance and availability for service I've worked on; looking for Senior Software Engineering opportunities.

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WORK EXPERIENCE

Oracle Cloud, Seattle, Jan 2021 – Present

- Worked on a distributed platform agnostic execution engine that serves entirety of the Oracle Cloud's CICD pipeline across all available regions serving more than 100,000 job executions at a time.
- Designed and implemented a solution that increased service's availability from 80% to 99% during monthly OS security updates. Solution leverages Kubernetes concepts for distributed scheduling to improve service level KPIs.
- Designed and implemented solution for migrating from a private Kubernetes cluster to Oracle's public offering. This saved $30,000 on compute expenditure in one quarter for OCI. Mentored junior engineers during project execution.
- Designed and automated Service Account generated for Dropwizard based Java application to connect to Kubernetes cluster during certificate rotation. Enhancing security, enabling touchless cluster upgrades with zero downtime.
- Implemented a multi-threaded state machine for executions engine. This brought down the processing time per job from 20ms to 3ms on average. This also improved the job queueing times leading to an improved customer experience.
- Founding member of the service formed to monitor and alert the on-premise engineers for network repairs during the early stages of data center build.
- Improved service operations with respect to observability and monitoring by developing a common library which emits dimension for metrics, now used by multiple teams at OCI using Golang in their services.
- Reduced "collection time" latency of gNMI notification received from OCI Data Center devices to the Kafka consumers from 6ms to 1ms on average (83%). This has a direct impact on external Oracle' customers infrastructure.

HCL, Jul 2020 – Jan 2021

- Lead a team of six to develop Native and Web applications for property insurance services.
- Improved user experience by migrating application from legacy Apache Wicket to Reach JS.

Modo Payments, Jul'19 – Dec'19

Application Containerization

- Designed API Specification using YAML files and used OAS 3.0 to create Golang templates for REST APIs.
- Integrated HELM as package manager using terraform commands for automated deployments with existing Kubernetes based architecture, increasing the deployment speed by 5x per day.

Citi, Pune, India, Jul'15 – Jul'18

Java Framework for Credit Risk Guarantor Evaluation

- Designed a framework for evaluation of Guarantors for Citi Credit Risk Team using Spring MVC architecture.
- Created a notification/email service, enabled credit application approval remotely, hence reducing latency in the process.
- Increased the monthly rate of onboarding by 37%, awarded Citi quarterly performance excellence award (QPE).

Project

FireTruck – T-Mobile Customer Service Platform (T-Mobile Hackathon Winner), Oct 2019

Designed an algorithm to predict performance/logistic issues and contacting clients before registering customer care complaint.

- Leveraged NodeJS for creating REST APIs to save and fetch customer complaint data to MongoDB.
- Applied Twilio SMS API to alert users based on number of complaints in a particular area above a certain threshold.
- Implemented Parts of Speech (POS) Tagging using Stanford POS Tagger to categorize incoming customer complaints.

EDUCATION

University of Texas at Dallas, Dallas USA
Aug'18 – Jun'20

Master of Science in Computer Science

GPA: 3.78/4.00

Relevant Courses:
Design and Analysis of Algorithms, Big Data Management and Analytics, Software Defined Networks, Database Design, Computational Geometry, Number Theory, Data Mining.

BITS Pilani, Pilani, India
Aug'11 – Jun'15

Bachelor of Engineering (Hons.) in Computer Science

SKILLS

Languages
Golang, Java, SQL. Python, Terraform, Bash, C, C++, Scala, Node JS.

Tools
Docker, Git, Kubernetes, AWS, Redis, Eclipse, IntelliJ, Jupyter Notebook, Atlassian JIRA, Sonar.

Frameworks
Oracle Cloud, Amazon Web Services, Restful Web Services, MongoDB, My SQL, Spring, Hibernate, Agile, Hadoop, Apache Spark, Dropwizard, gRPC, gNMI