Mohit Sinha

J +91 9860103730 ■ mohitsinha1994@gmail.com in mohitsinha1994 🕝 sinha-mohit

Summary

- Backend Software Developer with 4 years of experience in developing and maintaining Samsung platform microservices.
- Managing the backend for Samsung Global Wallet and previously contributed to QuickShare and PrivateShare services.
- Proficient in Java, Spring Boot, and AWS Cloud, with expertise in secure, scalable, and efficient cloud deployments.
- Skilled in system design, API development, and building high-performance microservices and distributed systems.

Education

• Masters in Computer Technology, Indian Institute of Technology, Delhi (Jun 2019 – May 2021) CGPA 8.8/10

• Bachelor's in Electronics and Communication Engineering, RCOEM, Nagpur (Jul 2013 – Jun 2017) CGPA 7.4/10

Technical Skills

• Languages: Java, C++, C, Go.

- Technical Knowledge: Data Structures & Algorithms, Object Oriented Programming, High Level System Design, Low Level Design & Design Patterns, SOLID design principles, MVC design pattern for microservices, Event Driven Architecture, Distributed Systems, Webservices and Microservices
- Technologies & Tools: Spring Boot, MySQL, NoSQL, Docker, Kubernetes, AWS (IAM, EC2, ECS, S3, DynamoDB, Aurora, KMS, ALB, API Gateway, Cloudwatch), Github Actions, Jenkins, Redis, RESTful WebServices, gRPC, Postman, Junit, Mockito, JMeter, Linux, Apache Kafka, ELK stack (Elasticsearch, Logstash, Kibana), Git

Experience

Lead Engineer (SDE 2), Samsung Research Institute Bangalore, India

Sep 2022 – Present Bangalore, India

Samsung Global Wallet (Digital Wallet Team)

- Working as a backend engineer for Samsung Global Wallet, maintaining and developing wallet related features.
- Enabled seamless user verification with "Verify with Samsung Wallet" button, supporting 2M DAU and verifier cards.
- Simplified partner integration of the "Verify with Samsung Wallet" services, streamlining user verification workflows.
- Performed E2E deployment: GitHub action scripts, Docker files, ECS task definitions, and ECS service setup.

QuickShare & PrivateShare Team (Blockchain Labs)

- Maintaining backend related services for Private Sharing mode in Quick Share, a secure media-sharing Samsung app.
- Awarded Samsung Excellence Award for enhancing system performance, increasing TPS from 25 to 1000 in two qtrs.
- Led deployment of a RAFT Consensus Algorithm based cluster, a distributed consensus protocol designed to manage a replicated log of data across multiple servers, ensuring consistency across distributed system.
- Increased file upload/download speed by 20% by implementing Multipart Upload APIs using signed URLs of S3.
- Reduced AWS costs by 35% by implementing an API gateway microservice to replace managed AWS API Gateway.
- Migrated all microservices to Java 21 and Spring 3, including GitHub script updates and virtual thread enablement.
- Managed server infrastructure: ECR image retention policy, MySQL 8 migration, and S3 image retention policy setup.

Cloud Software Development Engineer, Intel, India

Jul 2021 – Sep 2022

Kernel Driver Developer at Infrastructure Processing Unit (IPU Team)

Bangalore, India

- Contributed to Intel's Data Center team, offloading tasks from host CPU cores to IPU cores for better performance.
- Improved Virtio-based emulation of SmartNIC as a block or network device, reducing CPU utilization by 35%.
- Developed a virtio-net kernel driver to interface SmartNIC blocks with Intel Xeon processors and 16 ARM cores.
- Enhanced memory management, IOMMU mapping, and DMA operations, achieving 200+ Gbps throughput using IPU cores enabling user-space applications and ARM cores to share memory efficiently, reducing CPU resource consumption by 30%.

Leadership / Achievements

- Earned the prestigious Samsung Excellence Award, distinguishing myself as the sole recipient in a team of 11.
- Secured a quick promotion with a year of joining at Samsung, appointed as the project lead.
- Qualified and passed Samsung Professional Software Competency test with 100% score.
- Graduate Aptitude Test in Engineering (GATE): AIR 777 (99.25 percentile).