

## Software Engineer Profile

Solutions-oriented Software Engineer with 5 years of experience in driving innovation and delivering impactful technology solutions; translating complex customer needs into effective product features through cross-functional collaboration. Skilled in system design, full-stack development, and maintaining high standards for operational stability, security, and performance. Proven success in developing high-quality production code and troubleshooting complex software issues while fostering a culture of continuous process improvement. Proficient in delivering scalable solutions that enhance user engagement, leveraging expertise in Java, React, and AWS Cloud Platform to lead technical initiatives and high-performing teams.

## Technical Proficiencies

<b>Programming Languages:</b>	Java, JavaScript, Typescript, Python, HTML, CSS, SASS, C++.
<b>Frameworks:</b>	Spring boot, React (Material-UI), Angular 14, Next.js, Django.
<b>Cloud Infrastructure:</b>	AWS (Lambda, ECS, EC2, Fargate, SQS, ECR, DynamoDB, S3, IAM, Cloudwatch, Cloudformation), AWS CDK.
<b>Miscellaneous:</b>	GraphQL, Apache Kafka, MongoDB, CI/CD, Object-oriented Programming, Unit Testing, Git.

## Career Experience

### Amazon Web Services (AWS), Herndon

Sep 2024 – Present

#### Software Development Engineer II

Member of the Quality Enablement Team (QET) within the AWS Commerce Platform (CP), leading the strategic development of a federated software framework designed to decentralize testing and accelerate global service expansion. Focused on empowering CP builders to create and share reusable test components, thereby streamlining the validation of Commerce Platform services and reducing Mean Time to Resolution (MTTR) of validation failures. Spearheaded critical initiatives in **operational excellence**, **security hardening**, and **system reliability** to support a high-growth roadmap, including AWS Region builds and Seller of Record (SoR) launches.

- Designed and architected a **federated testing framework** (Java) and **infrastructure components** (as CDK constructs) that allowed service teams to independently publish and execute standardized test components.
- Supported major business programs, including the **ESC region launch** (late 2025) and **13 Seller of Record (SoR) launches** (2025), by maintaining constant collaboration with Commerce Platform service teams, providing technical guidance, and establishing the standard operating procedures (SOPs) for test component authoring. This enabled service teams to create and utilize **100+** test components to date, with 12 additional SoR launches slated for 2026.
- Migrated 15 legacy components to the federated framework by shifting the ownership to service teams (shift-left model), resulting in **~60%** coverage now being driven by service-owned components while ensuring a transparent experience for end-users.
- Eliminated critical race conditions following Correction of Error (COE) events in high-volume billing batch processing by designing a new execution strategy and proactive monitoring system to prevent stale executions and system failures.
- Built a real-time health dashboard for test component executions, providing on-call engineers with instant visibility into component health, customer impact, and triage metrics, reducing Mean Time to Resolution by **50%**.
- Enhanced operational visibility by introducing throttling and latency widgets for QET-owned services, facilitating faster pinpointing of customer-impacting issues.
- Reduced non-actionable alarm noise by **75%** through a "Dive Deep" analysis of one year of historical ticket data and fine-tuning alert thresholds to focus the operational queue on high-signal system events.
- Led the strategic adoption of a new security framework for QET-owned services, securing necessary exceptions and migrating resource sets to hardened security roles.

### BNY Mellon, Jersey City

Jul 2020 – Jun 2024

#### Senior Associate (Full-stack Engineer)

Administer all aspects of migrating all business notifications to a new event-driven architecture. Improve efficiency and effectiveness of software development processes by executing industry-leading coding standards and agile methodologies; lead and guide **2** software interns on best practices for process improvement. Surpass defined business deliverables and timelines by providing strategic support to **5** team members in developing and deploying the app's user interface. Drive user adoption and facilitate seamless project transition through new end-to-end features and partnerships with product managers.

- Built and managed a **no-code/low-code workflow orchestration platform** in the Shared Service Technology team by maintaining high-level collaborations with stakeholders and product managers aimed at enabling business automation with over 15k reputable and digitized processes.
- Decreased average notification delivery time from 23 minutes to **3** minutes, generating a **\$2.5 M** cost saving by accelerating delivery speed.
- Executed a Conditional Block Builder and Evaluator system using React Flow network and Spring Boot microservice; increased business operations speed by **38%** by revamping complex conditional logic development processes.
- Implemented Java multithreading to efficiently perform workflow task actions in bulk, resulting in a **10x** improvement in performance and system processing speed.

- Enhanced development productivity by **200%** by crafting a Config screen UI reusable utility for workflow management.
- Ensured real-time access to cached data across nodes by creating an in-memory cache synchronization solution within a distributed system utilizing message queues; monitored and maintained high data consistency and availability.
- Led UI project to improve experience for **4,000** daily active users within a total user base of **25,000**, delivering a more responsive interface and reducing user-reported issues.

## Fidelity Investments, Chennai, India

May 2019 – Jul 2019

### Software Development Intern

Developed and tested software modules to enhance the functionality of investment management tools. Collaborated with the development team to identify and troubleshoot software bugs. Assisted in the design and implementation of database schemas to optimize data storage and retrieval. Documented software processes to facilitate knowledge transfer within the team.

- Increased data processing efficiency by **25%** by introducing a GraphQL layer for data retrieval.

## Key Projects

### Reddit clone: [Project Details](#)

- Developed and deployed a full-featured Reddit clone with functionalities including post creation, commenting, and upvoting/downvoting.

### Task Management Dashboard: [Project Details](#)

- Built a project management tool with comprehensive project, task, and workflow management features, enabling teams to organize work and communicate seamlessly.

### E-content Management Portal:

- Developed the service page for a research management system for the institute library with a team of 3.

## Education & Awards

**B. Tech. in Electrical Engineering**, Indian Institute of Technology (IIT), Varanasi - Jun 2020

**Awards:** ACM ICPC 2019 Regionalist | Amritapuri, India & 1st prize in Spybits (Cryptography-based contest) | Udyam 2018