

Prerak Mathur

Software Engineer | Bengaluru, India

+91 9672614863 | mathur.prerak@gmail.com | prerakmathur20 | @PrerakMathur20 | prerak.tech

Summary

Software Engineer (SDE II) with 2+ years building high-throughput, fault-tolerant distributed systems at Walmart Global Tech. Specialized in event-driven microservices (**Apache Kafka**, **Cassandra**, **Java Spring Boot**) across platform engineering, observability, automation, and infrastructure reliability.

Work Experience

Walmart Global Tech

July 2024 – Present

Software Development Engineer II

Bengaluru, India

- **Platform:** Core contributor to Walmart's catalog data aggregation backend (IRO & Rollups); Online reactive service ingests product attribute events via **Apache Kafka** into **Cassandra**, while Offline reactive service fans out parallel calls to serve **fault-tolerant**, high-availability data across Walmart.com.
- **Automation:** Automated manual data re-ingestion and audit table validation on **GCP** using **Java** and **Apache Kafka**, eliminating **10–12 DevOps hrs/week** and reducing manual operations by **75%**.
- **Analytics:** Built an internal analytics dashboard (**React**, **Node.js**, **GraphQL**) enabling ad-hoc SQL queries for support teams, improving **observability** and reducing on-call reliance by **40%**.
- **Infrastructure:** Designed a reusable **Kafka** producer framework with **retry policies** and **DLQs**, adopted across microservices to improve delivery reliability and **fault tolerance**.
- **Performance:** Implemented **adaptive rate limiting** and backpressure control, stabilizing high-throughput event streams and Observing a **35%** peak surge reduction on **Grafana**.

Walmart Global Tech

May 2023 – June 2024

Software Development Engineer Intern

Bengaluru, India

- **Dashboard:** Built a returns lifecycle dashboard (**React**, **Node.js**, **GraphQL**), standardizing order tracking and reducing support ticket resolution time by **~30%**.
- **DevOps:** Built dependency management and secure **CI/CD** identity key generation for Walmart's internal developer platform, strengthening access governance and platform security.
- **Security:** Architected a **Java Spring Boot** gateway filter enforcing **authorization policies** for sensitive internal APIs, preventing unauthorized downstream access.

Zeko (formerly Qricle)

January 2023 – March 2023

Frontend Development Intern

Remote

- Developed **SEO-optimized** web apps and admin dashboard via **Next.js SSR** with responsive, accessible UI components, improving load performance and cross-device user engagement.

Education

Indian Institute of Information Technology, Lucknow

2020 – 2024

Bachelor of Technology in Information Technology

CGPA: **8.6/10**

Skills

Languages: Java, Python, TypeScript, JavaScript, C++, SQL, HTML/CSS

Frameworks & Tools: Spring Boot, React, Next.js, Node.js, GraphQL, REST APIs, Apache Kafka, PostgreSQL, Redis, Docker, GCP, AWS, Git, CI/CD, Kubernetes, Prometheus, JVM

Concepts: Distributed Systems, Microservices, Event-Driven Architecture, High Availability, Fault Tolerance, Observability, System Design, Rate Limiting, OOP, Agile, Load Balancing, Message Queue, DLQ, CQRS

Open Source & Projects

Tokis – Open Source React Component Library

2026

- Built and published an open-source **React UI library** on npm with **500+ weekly downloads**, implementing accessible **WAI-ARIA** components and a **token-based styling system** via CSS custom properties for scalable theming.

Self-Hosted Streaming Platform

2025

- Deployed a containerized streaming platform using **Docker** with encrypted remote access via **Cloudflare Tunnels**, implementing a **zero-trust architecture** with no exposed network ports.

Drone Development and Data Classification (Patent Pending)

2022 – 2023

- Led a **government-funded** project for India's Ministry of Science and Technology, developing an open-source drone platform for agricultural **ML** data analysis.

Achievements

Google Summer of Code 2022 Contributor (ScoreLabs) | Codeforces **Specialist (1411)** | CodeChef **4-Star** | **Rank 7**, Codeforces Round 826 | **Innovator Award** – Hack-o-Fiesta, IIIT-Lucknow | **Hacktoberfest Maintainer** (Internet Archive, Appwrite, CircuitVerse)