

# Kaustav Paul

Software Engineer – Full-Stack | Distributed Systems & Microservices | Cloud Technologies  
+91-9830843664 | paul.kaustav@outlook.com | [LinkedIn](#) | [LeetCode](#) | [GitHub](#)

## Skills

**Languages & Scripting:** Java, Scala, Python, C++, TypeScript, Bash

**Backend Frameworks & Tools:** Spring Boot, Akka, Flask, Node.js, Apache Airflow, WebSockets, JWT

**Big Data & Distributed Systems:** Apache Spark, Hadoop, YARN, Kafka, PubSub, Redis

**Database & Data Warehousing:** Oracle, PostgreSQL, HDFS, Google Cloud Storage, GCP BigQuery

**Cloud Platforms:** Google Cloud Platform (GCP), Red Hat OpenShift

**DevOps & Infrastructure:** Docker, Kubernetes (k8s), Helm, Jenkins, Terraform, Maven, Gradle

**Monitoring & Logging:** Grafana, Prometheus, Splunk

**CS Fundamentals:** Data Structures & Algorithms, System Design, OOP, DBMS, OS, Computer Networks

## Experience

### Deutsche Bank

Hybrid

#### Associate Engineer - Accelerated Promotion

Oct 2023 – Present

- Implemented a **Redis-based** queueing system to replace FIFO YARN scheduling, **allowing time sensitive jobs to be processed first** and ensuring that stress run outputs are made available to users with **minimal delay**
- Designed and developed a **high-performance REST API and WebSocket service** using Scala, Akka, Java, and Spring, **enabling real-time access** to stress run summaries on UI, significantly improving system responsiveness
- Developed a **scalable** data segregation service using Java, Springboot & Spark to organize trade data by country, enforcing **data governance protocols and enabling compliant cloud migration**
- Built a GCP Cloud Composer-based data orchestration solution to **automate data transfers** from on-prem HDFS to Google Cloud Storage, **reducing operational storage costs by 85%** under hybrid architecture rules
- Deployed JupyterHub on GKE using Terraform and GitHub Actions, configured network access to dbLLM APIs, enabling users to **analyze GCP-hosted data** using GPU-accelerated notebooks

### Deutsche Bank

Hybrid

#### Technology Analyst

Jul 2021 – Sep 2023

- Designed and developed a **scalable Data Quality Check framework** to validate large-scale datasets, using Java, Springboot & Spark; enabled users to **confidently sign off** stress-run processes based on data integrity.
- Automated the loading of **JIRA, ServiceNow & Incidents data** into ADC dashboard using Apache Airflow, increasing metric update frequency from **monthly to daily** and improving **operational visibility across teams**
- Implemented TDD for Stress Testing UI application using Jasmine (unit tests) and Protractor (e2e), achieving **80%+ test coverage for production compliance**

### SkyBits Technologies Pvt Ltd

Kolkata, West Bengal

#### Fullstack Developer Intern

Apr 2020 – Jun 2020

- Engineered a data processing pipeline to clean and transform user-provided business KPIs and SPIs and designed an intuitive dashboard to improve daily decision-making and **enhance stakeholder engagement**
- Technologies used: Node.js, MySQL, ETL, React, Chart.js, React Gauge

### Itobuz Technologies Pvt Ltd

Kolkata, West Bengal

#### MERN Stack Developer Intern

Dec 2019 – Jan 2020

- Developed an automated invoice management system for streamlined operations and integrated a secure role-based access control (RBAC) system to **safeguard sensitive financial data**
- Technologies used: MERN stack (MongoDB, Express.js, React, Node.js), JWT authentication

## Education

### Indian Institute of Engineering Science and Technology, Shibpur

Jul 2017 - Jun 2021

#### BTech in Computer Science and Engineering

8.86/10 CGPA