

Utsab Chowdhury

Kolkata, West Bengal • utsab.c97@gmail.com • linkedin.com/in/utsabchowdhury47

Software Engineer

Software Engineer with experience delivering **high-scale backend services, streaming data pipelines, and secure SaaS integrations** for enterprise customers.

At RudderStack, architected **warehouse-native Customer Data Platform (CDP) components** including **OAuth frameworks, event streaming layers, account management platforms, and reverse ETL pipelines** serving **50M+ daily events**.

Expert in **Go, Node.js, TypeScript, Kafka, Snowflake, Kubernetes, and cloud-native deployments (AWS, GCP)**. Adept at **system design, scalability, data governance (GDPR, SOC2), and cross-functional collaboration with product & customer teams**.

Seeking **Senior Backend / Data Platform / Solutions Engineer** roles with a focus on **scalable architectures, real-time data activation, and enterprise SaaS integrations**.

WORK EXPERIENCE

RudderStack

12/2020 - Present

RudderStack – Software Development Engineer II • Full-time

Remote (Various Locations)

- **Architected a plugin-based no-code integration framework**, enabling **20+ new SaaS connectors** to be onboarded with minimal engineering effort → **cut integration development time by ~35%**.
- Optimised **RudderStack's streaming pipeline** for **50M+ daily events**, reducing event processing latency by **20%** and improving throughput for enterprise customers.
- Designed an **enterprise-grade account management framework** supporting **multi-tenant deployments**, role-based access control (RBAC), and better customer data isolation.
- Led the **reverse ETL architecture refactor**, improving data freshness for Snowflake & BigQuery pipelines while reducing **warehouse query costs**.
- Built **advanced monitoring dashboards (Prometheus + Grafana)** to track event processing times, error rates, and queue backlogs, **reducing MTTR (Mean Time To Recovery) by 50%**.
- Defined **technical standards & best practices** for connector development, TypeScript migration, and streaming workload optimizations.
- Build **Rudderstack Shopify App** providing seamless connector for shopify ecosystem data to multiple platform ranging from Analytics, CRM, Attribution with baked-in solution for **Identity resolution**.
- Partnered with **Product Managers & Solutions Engineers** to design customer-facing integration solutions, aligning technical delivery with business priorities.

Software Development Engineer I • Full-time

Remote (Various Locations)

- **Developed and maintained key SaaS integrations** for the RudderStack Connector Platform, working with REST/GraphQL APIs for 15+ third-party tools (e.g., Salesforce, HubSpot).
- **Built secure OAuth 2.0 authentication flows** for connector onboarding, ensuring token lifecycle management, refresh handling, and **reducing integration errors by 30%**.
- Migrated **legacy Node.js services to a TypeScript-based modular structure**, addressing security vulnerabilities and **improving code maintainability by 40%**.
- Implemented **multi-stage Docker builds**, reducing image sizes by **50%** and accelerating CI/CD deployment times.
- Developed **React.js UI components** for the integration dashboard, improving the **admin experience for managing SaaS connectors**.
- Contributed to **data transformation pipelines** for event routing, improving processing throughput for **streaming + batch workloads**.
- Enhanced **integration service observability** by adding structured logging, error tracking, and basic latency metrics.

Tata Consultancy Services

07/2019 - 12/2020

Assistant System Engineer

Kolkata Area, India

- **Developed microservice-based backend APIs** using **Java with Spring Boot**, ensuring secure and high-performance communication between multiple banking services.
- Built a **metadata-driven document management framework** for the Credit Management System using **MongoDB for metadata storage** and **Apache Lucene for full-text indexing & type-ahead search**, improving **document retrieval speeds by 40%**.
- Designed and implemented **role-based approval workflows with hierarchical access control** to meet compliance requirements for sensitive financial documents.
- Integrated **email-based notification services** for workflow approvals/rejections with secure, actionable email buttons.
- Optimized **Spring Boot service performance**, reducing API response times by **15%** through efficient query strategies and caching.
- Collaborated with DevOps team to deploy services on **Tomcat & containerized environments** with continuous integration using **Jenkins**.

Assistant System Engineer Trainee

Kolkata, West Bengal, India

- **Designed core service modules** for a **centralized banking document repository**, enabling cross-team document sharing with improved security and auditability.
- Migrated **legacy SharePoint-based document storage** → **modern metadata-driven repository**, leveraging **MongoDB + Lucene-based search indexing** for faster retrieval and filtering.
- Implemented **workflow management features** with **Spring Boot-based backend services** for approvals, feedback loops, and risk management calculations.
- Built **role-based access control (RBAC)** modules with audit trails for sensitive document workflows.
- Created **email-driven workflow approvals/rejections** integrated with backend services, improving process adoption for end-users.

Saha Institute of Nuclear Physics (SINP), Kolkata

09/2018 - 06/2019

Summer Intern

Kolkata, West Bengal, India

- This project, we have optimized the plasma production experimental technique and have obtained some of the plasma fluctuations. We have also performed the experiment for the Paschen's curve which is in accordance with the Paschen's Law. Also, employed some non-linear analysis tools to investigate the underlying dynamics of such fluctuations, such as FFT and Phase Space reconstruction of the time series data from the plasma system along with the Recurrence Plots and determination of the Embedding Dimension. We also saw the application of Singular Value Decomposition as a tool to filter the noise from the data.

Damodar Valley Corporation

07/2017 - 07/2017

Engineering Trainee

Bankura Area, India

EDUCATION

Bachelor of Technology in Electronics and Instrumentation Technology

Maulana Abul Kalam Azad University of Technology, West Bengal formerly WBUT

01/2015 - 12/2019

SKILLS

- **Backend & APIs:** Go, GraphQL, Java, Node.js, REST APIs, TypeScript
- **Data Infrastructure:** BigQuery, Kafka, MongoDB, Postgres, Snowflake, Spark
- **Cloud & Infra:** AWS (Lambda, Cloud Functions), Docker, GCP (BigQuery, Kubernetes, Redshift, S3), Terraform
- **Monitoring & Security:** GDPR Compliance, Grafana, OAuth 2.0, Prometheus, RBAC
- **UI & Dashboards:** Material-UI, React.js, Redux

- **DevOps:** CI/CD (GitHub Actions), Infrastructure-as-Code, multi-stage Docker builds