

Sabu Shakya

Full Stack Software Engineer

+9779843416015 | sabushakya1@gmail.com | Lalitpur, Nepal | github.com/SabuShakya | linkedin.com/in/sabu-shakya-9b89a4123/ | stackoverflow.com/users/11709663/sabu-shakya

PROFESSIONAL SUMMARY

Results-driven Full Stack Software Engineer with 8+ years of expertise in building scalable applications using Java and JavaScript ecosystems. Specialized in designing microservice architectures and delivering high-performance solutions that drive business growth.

- Architected and implemented multiple successful microservice applications serving 50,000+ users
- Reduced system response times by 30-45% through performance optimizations and database query refinement
- Strong expertise in SDLC with experience in both Agile and Waterfall methodologies
- Proficient with cloud infrastructure, particularly AWS services (S3, SQS, CloudFormation)
- Experience leading development teams and mentoring junior engineers
- Deep understanding of Test Driven Development (TDD) with 90%+ code coverage on critical systems
- Strong knowledge of OOP principles and design patterns with focus on maintainable, scalable code

SKILLS

Backend: Java, Spring, Spring Boot, JUnit, Node

Frontend: JavaScript, React, Next.js, Jest, Enzyme

Data & Infrastructure: MySQL, PostgreSQL, Snowflake, Redis, OpenSearch, Docker, S3

Messaging & Integration: Kafka, RabbitMQ, SQS

Methodologies: Microservices, Design Pattern, Design Principle, Kanban, SCRUM, GIT

Tools: Nx, Lerna

WORK EXPERIENCE

Senior Software Engineer — Startup Medic (Remote)

12/2025 – Present

- Maintained and enhanced AI-assisted ETL pipelines on Snowflake, processing 250M+ records into a unified scoring system — including diagnosing and resolving major query performance bottlenecks and eliminating redundant computations across large-scale aggregation logic
- Developed backend services (Java/Spring Boot, Next.js server-side) powering dashboard configuration and data APIs, spanning PostgreSQL for application data and Snowflake for analytics — including multi-tenant dashboard config schema design, caching strategy implementation, and authentication infrastructure troubleshooting
- Contributed to frontend UI improvements to support dashboard functionality and data presentation

Senior Software Engineer — Renegade Nepal (Hybrid)

09/2022 – 11/2025

- Led the development of a microservices-based insurance marketplace platform that increased agent onboarding efficiency by 40%
- Implemented performance optimizations that reduced API response times by 30% and improved the overall user experience
- Mentored 4 junior developers, conducting code reviews and architecture discussions that improved team code quality

Senior Software Engineer — Machnet Technologies Inc (WFH)

10/2021 – 09/2022

- Developed RESTful APIs for a financial remittance platform handling \$5M+ in monthly transactions
- Designed and implemented security protocols that ensured compliance with financial regulations
- Created automated test suites that increased code coverage by 25% and reduced bug reports by 30%

Senior Software Engineer — F1soft International Pvt. Ltd. (Onsite)

10/2017 - 10/2021

- Successfully delivered 3 major financial applications used by over 50,000 users across Nepal
- Implemented payment gateway integrations that processed 10,000+ transactions daily
- Optimized database queries that reduced application load time by 45% for a key customer-facing application

EDUCATION

Bachelor in Computer Engineering — National College of Engineering (NCE)

09/2013 - 09/2017

HSEB — Prasadi Academy

07/2011 - 07/2013

LANGUAGES

Nepali, English, Newari

PROJECTS

Equity Quotient — Startup Medic

An AI-powered data platform that delivers visualized, comparable insights across different geographic levels in the USA. Dashboards are tailored to the specific needs of each organization — health metrics, socio-economic indicators, and other domain-specific use cases — enabling users to compare and contrast data across regions with AI-driven support.

Technologies: Java, Spring Boot, Snowflake, PostgreSQL, Redis, AWS, React, Next.js, Auth0

Contribution: Built AI-assisted ETL pipelines on Snowflake processing 250M+ records, resolved major query performance bottlenecks and redundant computation, developed backend dashboard configuration APIs and multi-tenant schema design, implemented pattern-based Redis caching, resolved authentication infrastructure issues, and contributed to frontend dashboard improvements.

Link: <https://equityquotient.io/>

Agency Height — Renegade Insurance

A specialized marketplace connecting insurance companies with individuals seeking insurance services. This platform facilitates seamless interactions, ensuring brokers (insurance agents) play a central role in guiding customers to suitable insurance products.

Technologies: Java, Spring Boot, React, PostgreSQL, Redis, AWS

Contribution: Led backend development, designed database schema, implemented agent matching algorithm that improved conversion rates by 25%.

Link: <https://agencyheight.com>

CRM — Renegade Insurance

A management application for insurance agents to manage their client relationships, track sales, and optimize their insurance offerings.

Technologies: Spring Boot, React, MySQL, AWS

Contribution: Architected the microservice structure, implemented real-time notifications, reduced page load times by 40%.

PaaS — Machnet

PaaS (Payment as a Service) is a mediator application that facilitates cross border payment solutions. It enables companies by providing license and compliance infrastructure along with banking and payment rails to move money across borders from countries like the US. One can easily integrate the APIs of PaaS and use it for payment processing, KYC verifications, compliance and AML checks, or payout payments to different destination corridors.

- Worked on payment payout modules and integrated third party payout services like Thunes and MFS.
- Worked on features like 'Company Onboarding'.

Technologies: Microservice, Java, Java EE, SQS, S3, PostgreSQL

Machpay Console — Machnet

The web application for the admin part where admins can keep track of their users, transactions and perform administrative tasks as per required. Also, reports can be viewed using the application.

Technologies: Java, Spring Boot, PostgreSQL, Hibernate, Spring Data JPA, JWT, Redis

Connect 'N' Pay — F1Soft

ConnectNPay is a payment aggregator developed for providing easy online transaction services. This system integrates multi payment services like telecom top-up, ISP payments, airline ticketing, bus ticketing and many more.

Technologies: Monolithic, Multi-Module (Maven), Java EE, Git, Scrum, Gitlab

Connect 'N' Pay V2 — F1Soft

The main application rebuilt in Spring Boot. Built in multi-module monolith architecture — to be transformed to microservice.

- Implemented HMAC, Basic Auth for security.
- Implemented filter chaining for log saving and validations.

Technologies: Monolithic, Multi-Module (Maven), Java, Spring Boot, Redis, HMAC, JUnit-5, Mockito, Spring Data JPA

Connect 'N' Pay - Admin — F1Soft

The web application for the admin part where services, clients and other configurations for the main application (Connect-NPay) are managed. Reports can also be viewed using the application.

- Worked on report generation and exporting Excel and PDF files.

Technologies: Monolithic, Spring Boot, Angular, MySQL

SMS Server — F1Soft

A project for facilitating SMS services with Java and Spring Boot in backend and Angular in frontend.

- Worked on minor bug fixes and implemented AES encryption and decryption in frontend.

Eappointments — F1Soft

An online/offline appointment booking application of Cogent Health Pvt. Ltd. (a subsidiary company of F1soft group). It facilitates an easy alternative to book doctor's or other health services appointments through online payment gateway platforms such as eSewa or Fonepay.

- Led the Frontend team.
- Developed major features like Doctor/Department Duty Roster, Appointment Billing, Offline Appointment Scheduling, Appointment Transfers and Refund, and Profile Based Role assignment.
- Built interactive features such as Double Shift Smart Search, Favourites menu, Dynamic Breadcrumb, Custom Hybrid Input, and Custom Editable Table.
- Used a mono-repo architecture (Lerna, Yarn, React Workspaces) with Jest and Enzyme for unit testing.

Technologies: Monorepo, JavaScript, ReactJS, Redux, Jest, Enzyme, LERNA, MySQL, Spring Boot

Nepal Krishi Company (NKC) ERP — F1Soft

A full-fledged ERP application developed for Buddha Air (a domestic airline company) facilitating the business needs of its subsidiary company to run agro-based rental services.

- Worked on features such as Machine Maintenance, Multiple Days Reservation, Reservation Transfer/Rescheduling, Report Generation, Work Planner etc.

Technologies: Monolithic, Java, Spring Framework, JavaScript, MySQL, Hibernate and Spring Data JPA

F1Analytics — F1Soft

Worked shortly on bug fixes of the frontend.

Technologies: JavaScript, ReactJS

Chipper — Freelance Projects

Chipper is a debt management application that helps users strategically pay off their debts and eliminate them sooner than usual.

- Implemented subscription module individually including both frontend and backend.
- Migrated the whole admin panel codebase (frontend) from CRA to Next.js.

Technologies: Java, Spring Boot, Microservice, MySQL, Hibernate, Spring Data JPA, ReactJS, Next.js, Node/Express