

Sawan Nepal

Software Engineer | Implementation Engineer

Calgary, AB | +1 (437) 262 4438 | sawan.42n@gmail.com | [LinkedIn](#)

Summary

Software and Implementation Engineer with 5 years of experience building scalable SaaS platforms and high volume backend systems in FinTech and B2B environments. Strong focus on backend & modern frontend architectures, performance optimization, and reliable API systems. Experienced collaborating with product, design, and stakeholders to deliver client facing features and scalable platform capabilities. Proven track record improving system performance, designing modular services, and delivering reliable production systems for high volume financial and enterprise workflows.

Core Competencies

- Fullstack Development
- Scalable Backend Systems
- Microservice & Event Driven Architectures
- API Design & Integration
- Relational Data Modeling
- Performance Optimization

Skills

- Languages: Ruby, Groovy, TypeScript, JavaScript, SQL, Python
- Frameworks: Ruby on Rails, Angular, Hotwire, Apache Camel, Next.js (React)
- Backend Systems: REST APIs, Microservices
- Databases: PostgreSQL, MongoDB
- Infrastructure: Docker, Linux, CI/CD
- Background Processing: Sidekiq, Redis
- Testing: RSpec, Cypress
- Product Engineering: Feature experimentation, rapid prototyping, cross functional collaboration

Engineering Impact

Performance Optimization: Reduced high volume integration pipeline processing time from 8 minutes to 16 seconds through PostgreSQL query refactoring, indexing strategy optimization, and Apache Camel route redesign, significantly improving client facing reporting SLAs.

Microservice Architecture: Designed modular, plug and play services enabling configurable enterprise deployments, reducing custom development cycles from multi week sprints to same day configuration for B2B clients.

Individual Contributor: Improved productivity by introducing shared utility libraries and standardized coding conventions that reduced repetitive boilerplate across services.

Experience

Sidetrade

Implementation Engineer

June 2024 – Present

Calgary, AB

Designed and implemented backend services supporting high volume FinTech workflows across multi tenant SaaS environments, enabling secure API integrations between enterprise financial systems.

- Configured and deployed secure private cloud environments for enterprise clients, ensuring high availability, data integrity, and stable API connectivity across financial systems and ERPs to connect with platforms including Coupa, Ariba, Enverus, Service Channel, Taulia and Tungsten among others.
- Optimized high throughput PostgreSQL queries and Apache Camel integration routes handling hundreds of API calls per workflow, significantly reducing processing latency.
- Designed modular backend services extending platform capabilities and enabling configurable enterprise deployments.
- Developed data transformation pipelines, validation logic, and automated workflows supporting large scale document and API exchanges.

- Partnered with solution architects and enterprise stakeholders to translate financial workflows into scalable technical implementations.
- Maintained internal documentation and cross team communication to improve delivery visibility across engineering and client teams.

SELISE Digital Platforms

Dec 2022 – Aug 2023

Software Engineering Project Lead

Thimphu, Bhutan

Led engineering teams by setting coding standards, improving developer experience, and ensuring high quality, maintainable software through mentorship, code reviews, and structured collaboration.

- Led development of web applications using Ruby on Rails, Hotwire, and Angular, delivering scalable client facing features across ecommerce and education platforms.
- Conducted technical research and solution evaluations (e.g., email delivery systems, analytics tools, integration services) to identify scalable product architectures before implementation.
- Partnered with product stakeholders and clients to translate requirements into technical designs, delivering features through iterative development cycles and rapid feedback loops.
- Owned features end to end including architecture design, API development, CI/CD pipeline configuration, deployment, and performance optimization.
- Contributed to internal Ruby gems, shared modules, and microservices supporting multiple product teams.
- Partnered with business analysts, QA, and clients to ensure clarity in requirements, sprint planning, and iterative improvements.

Software Engineer

Nov 2020 – Nov 2022

- Developed and maintained Ruby on Rails and JavaScript applications under aggressive delivery timelines.
- Collaborated across teams to deliver backend logic, UI features, integrations, and automated test pipelines.
- Assumed technical leadership responsibilities early in tenure, contributing to architectural decisions, helping peers and improving development standards across multiple product teams.
- Focused on clean, modular code and asynchronous processing patterns to increase application reliability.

SARK Enterprise

June 2021 – July 2022

Software Engineering Team Lead

Thimphu, Bhutan

- Directed the design and development of a currency reader application for the visually impaired using Flutter and Tensorflow.
- Managed communications and requirement gathering.

Selected Engineering Projects / Freelance

2025

Next.js Web Applications (React / TypeScript)

- Developed modern web applications using Next.js and TypeScript with server side rendering and optimized routing.
- Built reusable React components and responsive UI patterns for production websites.
- Implemented image optimization pipelines, contact forms, and SEO focused page architecture.

Personal & Professional Development

- AI Engineer Core Track. Ongoing
- Decoding Devops. Ongoing
- Principles of UX/UI Design - Meta. 2023

Education

Royal University of Bhutan, College of Science and Technology

Degree

Bachelors in Engineering

Other experiences

National Volunteer

May 2020 – July 2020

Humanitarian Aid Worker

Thimphu, Bhutan

- Served as a frontline volunteer during the pandemic, supporting quarantine centers with delivery of essential items, medication, sanitation, and mental health support.

Ugyen Training Institute

August 2019

Teacher Contract

Thimphu, Bhutan

- Taught mathematics & data analysis to graduates appearing for the Royal Civil Service Examinations.
- Wrote lesson plans, created exam papers and conducted mock exams.