

ABHISHEK BHATTA

Senior Software Engineer · Backend & Full-Stack · Remote
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SELECTED IMPACT

- Cost:** Reduced infrastructure costs by 76% — from \$5,000 to \$1,200/month at FleetPanda — through API optimisation, query tuning, and eliminating wasteful frontend call patterns.
- Performance:** Improved database performance by 30%, eliminating N+1 query bottlenecks on the most-trafficked application views.
- AI:** Designed and shipped a production RAG-based AI chatbot using pg-vector, covering the full pipeline from embedding storage and retrieval to scheduled refresh — launched as a pro-tier feature.
- Scale:** Architected and maintained multi-tenant SaaS platforms across petroleum logistics and affiliate marketing eCommerce, serving hundreds of businesses.

PROFESSIONAL SUMMARY

Backend-focused Senior Software Engineer with 8+ years of experience designing and scaling multi-tenant SaaS platforms across petroleum logistics, eCommerce, and non-profit sectors. Deep expertise in Ruby on Rails, Python, PostgreSQL, Javascript and cloud infrastructure on GCP and AWS. Known for building systems end-to-end — from open-source plugin frameworks and RAG-based AI pipelines to billing integrations and real-time logistics platforms. Experienced leading small engineering teams and setting technical standards. Currently deepening expertise in AI agents and LLM tooling, with a track record of shipping AI features into production.

CORE SKILLS

Tech Stacks	Ruby on Rails, Python, Java, GraphQL, ReactJS, EmberJS, TypeScript, Sidekiq
Databases	PostgreSQL, pg-vector, Redis, MySQL, Pinecone
Cloud & DevOps	GCP, AWS, Heroku, Docker, CI/CD, TDD (RSpec), Coralogix, ScoutAPM, Sentry, NewRelic
Architecture	Multi-tenant SaaS, REST/GraphQL APIs, Distributed Systems, Event-driven Design
AI & LLM	RAG Systems, Devin Flows, Agentic Workflow, Claude Code
Integrations	Stripe, Twilio, Pusher, HelloSign, Jira, ClickUp, Slack

PROFESSIONAL EXPERIENCE

Independent Study & Wellbeing

Feb 2026 – Present

Pursuing deliberate upskilling in the AI and LLM ecosystem — exploring agent frameworks, tooling, and the evolving product landscape. Concurrently practising Vipassana meditation and prioritising personal wellbeing in preparation for the next chapter.

Part-time Engineering Contractor · Narmada Infosys

Jan 2026 – Present

Good Works on Earth • US-based non-profit • Remote team lead

- Managing a team of interns — assigning tasks, reviewing work, and maintaining engineering workflows to support ongoing client delivery.
- Coordinating project tasks and ensuring continuity of delivery during a transitional period for the team.

Senior Software Engineer · Danphe Software Labs

Jun 2024 – Jan 2026

Fluid Commerce · Affiliate Marketing eCommerce SaaS · US Based

- Contributed as a senior engineer across multiple product pods in a distributed remote team, delivering backend features end-to-end across the platform.
- Built a complete RAG pipeline for an AI-powered chatbot — designing pg-vector embedding storage, retrieval logic, and an automated embedding refresh strategy using Sidekiq with a debounce approach — shipped as a pro-tier feature.
- Developed Catch Ups, a feature for proactively following up and notifying affiliates of product and media changes, improving affiliate engagement.
- Designed and maintained a Single Sign-On (SSO) system, enabling seamless authentication across multiple internal platform services from a single login.
- Designed the Droplets framework — an open-source, installable plugin system allowing companies to connect their back-office tools (e.g. QuickBooks) to the platform. Each droplet is an autonomous service with its own database, responsible for preserving logs, handling callbacks, and managing field mapping logic, with a published spec so third-party vendors can build their own.
- Restructured the legacy assets pipeline and multi-tenant architecture,
- Worked within GCP and Kubernetes environments — deploying jobs, running cron tasks, accessing logs for debugging, and validating background job execution in production.

Senior Software Engineer · Narmada Infosys

Jul 2023 – Jun 2024

Good Works on Earth • US-based non-profit • Remote team lead

- Led Stripe billing integration for subscription management, enabling recurring revenue flows and reducing payment-related support tickets.
- Optimised critical database queries, achieving measurable improvements in API response times on high-traffic endpoints.
- Drove Rails version upgrade, modernising the codebase and resolving outstanding security vulnerabilities.
- Strengthened software stability by increasing automated test coverage and enforcing spec quality standards.

Senior Software Engineer · Flightree Inc.

Jul 2023 – Nov 2023

- Designed and developed a full-stack flight booking system (Rails backend + React frontend), delivering end-to-end booking from search to confirmation.
- Collaborated with product and design teams to implement features on an accelerated delivery cycle using Heroku, Rails, and AWS.

Career Break — Personal Development & Wellbeing — Vipassana

Mar 2023 – Jul 2023

Took a deliberate work break to prioritise personal wellbeing, meditation practice(Vipassana) , and quality time with family.

Senior Software Engineer · Charger.dev

Dec 2022 – Mar 2023

- Built an Email Parser Service using Python on AWS Lambda to automate receipt management, processing inbound emails at scale.
- Designed/Developed AWS infrastructure (EventBridge, SES, S3, SQS, Lambda, RDS)
- Developed a Rails based web portal to manage and make corrections on imported receipts.

Guest Lecturer (Part-time) · Far Western University

Aug 2022 – Feb 2023

Department of Computer Engineering · Concurrent with Charger.dev role

- Taught Data Structures & Algorithms (DSA) to undergraduate engineering students,
- Designed curriculum materials and practical assignments via Google Classroom and GitHub, giving students hands-on exposure to real developer workflows..
- Authored midterm and final exam papers, ensuring assessments.

Senior Software Engineer / Solutions Architect · FleetPanda

Feb 2019 – Nov 2022

Petroleum Logistics SaaS · San Mateo, CA — Remote · Joined as early engineer, grew into solutions architect over 3+ years

- Owned backend architecture for a multi-tenant logistics platform supporting real-time dispatch, invoicing, and driver management across 20+ fuel distribution customers and hundreds of active fleets.
- Built RESTful and GraphQL APIs with standard authentication and role based access control, powering customer-facing dashboards and driver mobile workflows.
- Integrated a Twilio-based messaging system enabling dispatchers to text/call the drivers in the field directly from the web app – critical for reaching offline drivers during active dispatches.
- Designed and Developed an Application Tracking System (ATS) for driver hiring, integrating HelloSign e-signatures into core workflows, replacing manual processes and reducing onboarding overhead.
- Built workflow systems for driver shift confirmation, inventory management with automated reconciliation, and back-office integrations with DTN, Quickbooks and tank monitoring APIs.
- Actively worked on optimizing the infrastructure across Heroku, identifying the performance bottlenecks, optimizing slow APIs, tuning queries and providing structured feedbacks to frontend on excessive call patterns — reducing server cost from \$5000 to \$1200 /month
- Established backend code standards, review processes, CI/CD pipelines and documentation practices as the team scaled.

Software Engineer · Leapfrog Technology

Jul 2016 – Nov 2018

Kathmandu, Nepal · First professional role post-graduation

- Designed & Developed R3, a project management web app for Language Scientific (US client), built on Ruby on Rails.
- Built M-sights Object Manager — a web-based database visualisation tool in EmberJS.
- Created RCardScanner, an Android OCR app as an intern project, to top up a recharge card using a camera.

EDUCATION

Bachelor of Computer Engineering

Sep 2012 – Sep 2016

Kathmandu University, Nepal

+2 Science (Higher Secondary)

May 2012

Radiant Higher Secondary School, Nepal

CERTIFICATIONS

- Vim for Ruby Developers
- Rails with Active Record and Action Pack
- Robotics — Columbia University (MicroMasters Programme)
- Data Science / Machine Learning — Columbia University (MicroMasters Programme)
- Artificial Intelligence — Columbia University (MicroMasters Programme)

References available on request · [linkedin.com/in/avilsekh](https://www.linkedin.com/in/avilsekh) · github.com/aviisekh