Nabin Bhusal

Senior software engineer · Toronto

nabinbhusal80@gmail.com
linkedin.com/in/er-nabin-bhusal
github.com/er-nabin-bhusal

Senior Software Engineer with 7+ years of experience building and scaling cloud-native applications end to end. Strong backend focus with hands-on ownership of system design, APIs, data pipelines, and AWS infrastructure, while actively delivering production frontend features when needed. Experienced in migrating monoliths to microservices, optimizing cloud costs at scale, and shipping high-traffic full-stack products using Python, TypeScript, React/Preact, and Infrastructure as Code (AWS CDK, Terraform).

EXPERIENCE

Technical Lead

Feb 2025 – Present

ShipInsure (acquired EcoCart)

Utah, USA

- Led end-to-end development of the primary widget platform, covering infrastructure design, configuration management, and full-stack delivery across e-commerce stores using primarily TypeScript, React, and Preact.
- Built and delivered a RAG-based internal docs search system using embeddings with scalar and vector search on Qdrant, enabling fast, accurate knowledge retrieval across engineering teams.
- Built Loop Engineering, an internal end-to-end development tool that cut coding and review time significantly and became the primary workflow for internal engineering teams.

`TypeScript` `React` `Preact` `Qdrant`

Software Engineering Consultant

Nov 2024 – Mar 2025

Podimetrics

Somerville, Massachusetts

- Brought in as a consultant to design and stabilize production infrastructure for a growing healthcare platform.
- Built scalable ECS-based background and API services with PostgreSQL, Redis, load balancers, and production-grade networking using Terraform.
- Designed Terraform infrastructure for a Next.js application, including CloudFront, domain routing, and CI/CD automation via GitHub Actions.
- Reviewed a legacy MySQL-to-DynamoDB migration, advising on improved data modeling, scalability, and security practices.

`Terraform` `ECS` `PostgreSQL` `Redis` `Next.js`

Technical Lead

Jun 2021 – Feb 2025

EcoCart

California, USA

- Owned technical direction for backend, infrastructure, and data systems, and provided architectural guidance across frontend initiatives.
- Architected and scaled integrations with Shopify, WooCommerce, BigCommerce, Stripe, and Recharge, enabling seamless merchant onboarding.
- Redesigned AWS infrastructure (S3, DynamoDB, and related services), reducing cloud spend by about $80K a year while improving reliability.
- Designed and open-sourced a shared Lambda communication Python library, reducing inter-service latency and execution costs.
- Led engineering and product integration for the company merger, consolidating platforms, dashboards, and offerings with minimal customer disruption.
- Led deployment of in-house ML models on ECS using FastAPI to replace AWS Rekognition and third-party NLP services, saving about $50K a year.
- Architected a scalable data pipeline from DynamoDB to Redshift, replacing legacy systems and saving about $60K a year.
- Co-led migration from a Django monolith to a microservices architecture, including data migration from self-hosted MariaDB to DynamoDB.
- Standardized infrastructure and deployments using AWS CDK and GitHub Actions, enabling fully automated CI/CD with testing and quality gates.
- Built and scaled merchant and customer facing dashboards and APIs using Django and FastAPI on the backend and TypeScript with React and Preact on the frontend, supporting onboarding, configuration management, analytics, and billing.

`Python` `Django` `FastAPI` `TypeScript` `React` `AWS CDK` `DynamoDB`

Software Engineer

May 2018 – Apr 2021

Magdotnet

Singapore

- Built the backend for a SaaS booking platform for salons, integrating payments, Google Maps, and scheduling with Django, Postgres, Celery, and Redis.
- Developed a marketplace for event photographers, including a custom image framing feature using HTML Canvas, MongoDB, and Django.
- Created and published a mobile e-commerce app with React Native for both the Play Store and the App Store.
- Built a web-based memory game for Dell's advertising campaigns using React and Node.js.

`Django` `PostgreSQL` `Celery` `Redis` `React Native` `Node.js`

Co-founder / Software Engineer

Jan 2019 – Jan 2021

Proper Class

Kathmandu, Nepal

- Co-founded and built an online learning and mentorship platform connecting students with mentors.
- Led full-stack development of a CRM web application for the Survey Branch of the Government of Nepal using TypeScript and React.
- Built the frontend for an online mentorship platform with chat, kanban boards, drag-and-drop, and an interactive drawing board, mostly with TypeScript and React.
- Contributed to a React Native chat application for an astrology-focused chat platform.

`TypeScript` `React` `React Native`

SKILLS

LANGUAGES	Python · TypeScript · JavaScript · C++
BACKEND	Django · FastAPI · Flask · Chalice · AWS Powertools
CLOUD	ECS · Lambda · S3 · DynamoDB · Redshift · Terraform · CDK
DATA	PostgreSQL · DynamoDB · Redshift · Redis · MySQL
FRONTEND	React · Preact · React Native

EDUCATION

Seneca College
Oct 2023

Post-Graduate Certificate: Project Management in Information Technology
Markham, ON

Tribhuvan University
Jan 2019

Bachelors in Computer Engineering
Kathmandu, Nepal