ASHIM PAUDEL

Backend Developer | System Design Enthusiast

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github.com/Ashimpaudel09 | linkedin.com/in/ashim-paudel-620ab4341

PROFESSIONAL SUMMARY

Backend engineer who cares about the logic and architecture behind the code, not just writing it. Passionate about system design and building reliable, scalable systems. Computer Science and IT graduate ready to take on backend challenges and contribute to well-engineered products.

TECHNICAL SKILLS

Programming: TypeScript, JavaScript, Python

Backend: Node.js, Express, Fastify, RESTful APIs, FastAPI, BullMQ, Payment Integration

Databases & Caching: PostgreSQL, MySQL, MongoDB, Redis, Prisma

Frontend: Next.js, React.js, Tailwind CSS

DevOps & Tools: Docker, Git & GitHub, CI/CD, Turborepo

Concepts: Idempotency, Caching Strategies, Job Queues & Workers, Monorepo Architecture

PROJECTS

E-Commerce Backend *TypeScript · Express · Node.js · Redis · PostgreSQL · BullMQ*

github.com/Ashimpaudel09/Ecommerce-Backend

- Built a complete end-to-end backend covering product listing, cart management, order management and online payments.
- Designed version-based caching with Redis for product listings, so cached data is invalidated cleanly when products change.
- Used idempotency keys across orders and payments to guarantee an order is never paid twice and no duplicate payment request is created for the same order.
- Integrated the eSewa payment gateway (sandbox) and used BullMQ for background job processing.

JobFlow – Distributed Job Processing System *TypeScript · Node.js · Express · Redis · PostgreSQL · Turborepo*

github.com/Ashimpaudel09/JobFlow

- Architected a backend-focused system using multiple worker processes to pick up and execute queued jobs concurrently.
- Used Redis for job queuing and coordination between the API and workers.
- Structured the codebase as a Turborepo monorepo to share code and keep services modular.

Crop Recommendation & Expense Tracking System *Next.js · Node.js · Express · MongoDB · Python · Tailwind*

github.com/Ashimpaudel09/crop-recommendation-system

- Built a full-stack agricultural platform with a Next.js frontend, a Node.js core backend and a dedicated Python FastAPI service for ML predictions.
- Implemented Random Forest and Logistic Regression from scratch, without scikit-learn or other prebuilt ML libraries, running both in parallel and comparing outputs to improve recommendation accuracy.
- Designed an expense tracking module to log, categorize and monitor farm expenses alongside crop recommendations.
- Used MongoDB as the primary database, with schemas supporting both the recommendation engine and expense tracking.

More projects: github.com/Ashimpaudel09?tab=repositories

EDUCATION & LANGUAGES

Bachelor in Computer Science and Information Technology (BSc CSIT) *2022 – 2026*

ASMT College

+2 Science *2020 – 2022*

KIST College

Spoken Languages: Nepali (Native) | English (Proficient)