Navneet Dhillon

Newest Project 🚀 | navneetdhillon79@gmail.com | Github | Linkedin

Experience

Backend Developer | Riipen **Mar. 2025 – May. 2025**
AI Code Generator (working title) *Remote*

- Built a Lovable-style AI code generation backend from scratch in **Python**, using **Claude** to generate and modify project code from prompts.
- Designed and shipped **REST APIs** for code generation, updates, and project management, with a versioning system that saves the file tree and pseudocode for every request.
- Refined prompts and added response validation, producing noticeably better AI output.

Frontend Developer | Riipen **Dec. 2024 – Feb. 2025**
PetDrifts *Remote*

- Built the Pet Profile page in **React** and **JavaScript** with **REST API** integrations and secure authentication, letting users create and update pet profiles.
- Developed a **OpenAI-powered** AI analysis component that surfaces actionable insights for **50+ users**.

IT Support Co-Op Student **Sep. 2024 – May 2025**
Gatekeeper Systems *Abbotsford, B.C.*

- Automated employee onboarding and offboarding across multiple applications and servers with **PowerShell** and **Azure Logic Apps**, **saving 2 hours of work per hire.**
- Managed **Linux servers** (updates, configuration, performance monitoring) and wrote data migration scripts that enabled integration between software systems.

Projects

Smidge 👨‍🍳 **Aug. 2026 – Present**
React Native, TypeScript, Node.js, PostgreSQL, Prisma, Claude API, Clerk

- Built a streaming AI recipe assistant with **tool-calling** and **propose-and-confirm** edits.
- Designed a **three-tier nutrition engine** with LLM re-ranking that returns source-ranked macros.
- Built a **social media importer** with an audio-transcript fallback, extracting recipes with Claude.
- Implemented **offline-first** persistence (React Query, MMKV) and shipped to **TestFlight**.

QuizMind 🧠 **May. 2026 – Aug.2026**
React, TypeScript, Node.js, Express, GraphQL, MongoDB, OpenAI, Stripe, Auth0, AWS

- Built and deployed an **active learning** study app that turns uploaded documents or text into flashcards and graded quizzes.
- Developed an **OpenAI** pipeline with **structured JSON outputs** and **server-side grading**.
- Deployed a **full-stack serverless app** with **AWS CDK** for **a few cents a month**.

Server Redundancy Management System **Jan. 2026 – April 2026**
Java, OOP, Distributed Systems, Multithreading, TCP Sockets

- Built a distributed primary-backup server cluster with **automatic failover**, heartbeat-based failure detection, and deterministic leader election across multiple JVM processes.
- Applied Singleton, Observer, and Abstraction–Occurrence patterns; simulated real-world failures, achieving **failover recovery in under 2 seconds**.

Education

University of the Fraser Valley **May 2023 – Dec 2026**
Bachelor of Computer Information Systems, Concentration in Software Development *Abbotsford, B.C.*

Technical skills

Languages: Python, TypeScript, Java, SQL
Tools & Technologies: React, Node.js, Tailwind, PostgreSQL, MongoDB, AWS (Lambda, API Gateway, S3, CloudFront, CDK), Auth0, Stripe, REST APIs, GraphQL, Git, Linux, Multithreaded TCP Sockets