Rohan Poudel

West Haven, CT | github.com/rohanpoudel2 | linkedin.com/in/rohanpoudel2 | rohanpoudel2@gmail.com

Experience

Software Engineer, Fluid Commerce – Lehi, UT — Aug 2025 - Present

- Built core Liquid-based page generation workflows, including template rendering and publish/preview behavior.
- Implemented large-scale template translation work using AI by standardizing translation structures and improving completeness and change detection across locales.
- Integrated iterative, tool-calling AI workflows (Anthropic models) into a dynamic page builder.
- Improved dynamic page builder responsiveness and load times on complex pages by **50%** through query parallelization, request decomposition, and state/debounce refactors.

Technical Support Assistant II, University of New Haven – West Haven, CT — Aug 2025 - Present

- Developed and maintained a Student Support Bot, improving response times and automating common support requests.
- Provided technical support to students troubleshooting hardware and software issues across university systems and devices.
- Assisted with network connectivity, account management, and software installation, ensuring minimal disruption to academic activities.

Software Engineer, Danphe Software Labs – Kathmandu, Nepal — Jul 2023 - Jul 2024

- Built a FastAPI backend by consolidating **30+** AWS Lambda functions into a single service, improving maintainability.
- Implemented ingestion for **1M+** product records using batch writes and query tuning, preventing timeouts under load.
- Integrated AWS Cognito, S3, SQS, and Rekognition for a React Native app, supporting authentication and media workflows.
- Added AI features using AWS Bedrock for product descriptions and semantic search, supporting content and discovery flows.
- Improved frontend load times by **30%** by reducing unnecessary renders and optimizing data-fetch patterns.

Technical Skills

Languages: TypeScript, JavaScript, Ruby, Python, SQL
Frameworks: React, React Native, Ruby on Rails, FastAPI, Django
Cloud: AWS, Firebase, GCP, Supabase
Databases: PostgreSQL, MySQL, MongoDB
Tooling & Platforms: Docker, Git, Postman, Figma

Publications

Dipesh Tharu Mahato, **Rohan Poudel**, and Pramod Dhungana, "TriGuard: Testing Model Safety with Attribution Entropy, Verification, and Drift," *arXiv preprint* arXiv:2506.14217, 2025.

Education

University of New Haven, Master's in Computer Science — May 2026

- **Awards:** Dean's Scholarship

Leeds Beckett University, Bachelor's with Honors in Computing — Jul 2023

- **Awards:** Academic Performance Scholarship

Projects

CommuteMate (GoatHacks) | Django, React Native, TypeScript — 2025

- Built a ride-sharing app for university students using geospatial algorithms to match commutes, enabling cost savings.

MedTrain AI (HackPrinceton) | Unity, Ruby on Rails, Convai — 2024

- Developed a VR medical simulation for Meta Quest, integrating AI-powered virtual patients with real-time conversation to help medical students practice diagnostic and communication skills.

CLI Image and Video Compressor | JavaScript — 2023

- Published a JavaScript CLI package for batch image and video compression, reducing upload times, with **960+** downloads on npm.