

Bipul Regmi

Software Engineer · Kathmandu, Nepal · +977 9848601460 · regmibipul2015@gmail.com
<https://github.com/idiocter> · [linkedin.com/in/bipul-regmi-78b26524b](https://www.linkedin.com/in/bipul-regmi-78b26524b) · bipulregmi.com.np

SUMMARY

Software engineer working across agentic AI and full-stack development. Builds large language model (LLM) systems that plan, use tools, and finish a task on their own, and the web applications they run inside. Ten months as a backend developer at Bichitras. Python and JavaScript, mostly Django, FastAPI, React and Postgres. Final-year BSc (Hons) Computer Science in Kathmandu.

SKILLS

Agentic AI and LLMs: Agent frameworks (LangGraph, LangChain), multi-agent orchestration, RAG (retrieval-augmented generation), tool use, guardrails, LLM fine-tuning (QLoRA), Llama API

Vector and data: PostgreSQL with pgvector, PostGIS, MySQL, MongoDB, Redis

Machine learning: Classification and regression models, preprocessing, training, evaluation (Python, Jupyter)

Programming: Python, JavaScript, TypeScript, Java, PHP

Backend and web: FastAPI, Django, Spring Boot, Express, Node.js, React, Next.js, REST APIs, WebSockets

Infrastructure: Docker, Google Earth Engine, n8n workflow automation, Git

EXPERIENCE

Backend Developer Intern — Bichitras · Jun 2025 – Mar 2026

- Backend work in Python with Django and FastAPI, and in JavaScript with Express and Node.

PROJECTS

Autonomous Development Agent — Python, LangGraph, FastAPI, pgvector, Docker

[Source Code: github.com/idiocter/autonomous-development-agent](https://github.com/idiocter/autonomous-development-agent)

- Takes a GitHub issue and resolves it end to end — plans the change, writes the code, runs the tests, debugs what fails, opens the PR. No human in the loop.
- LangGraph handles the multi-agent orchestration behind a FastAPI service. Agent state and embeddings both live in PostgreSQL, with pgvector as the vector database.
- RAG over the repo itself, so it reads the real codebase.
- Generated code runs in a Docker sandbox, with guardrails on what the agent can reach.

Disaster Analysis Agent — Python, PostGIS, Google Earth Engine

[Source Code: github.com/idiocter/-disaster-analysis-agent](https://github.com/idiocter/-disaster-analysis-agent)

- Multi-agent system that answers a plain-language question like "forest loss in kathmandu" with a full geospatial analysis.
- Resolves place names to geometry through PostGIS, then calls Google Earth Engine for the imagery.
- Scores risk for the area and writes out maps and a report.

Quantum Theory Learner — React, Django, Postgres, Llama API

[Live: quantum-theory-learner-theta.vercel.app](https://quantum-theory-learner-theta.vercel.app)

- A web app for people learning quantum theory on their own, without a physics background to fall back on.

- React front end, Django and Postgres behind it, Llama API driving the learning content. Deployed on Vercel.

Bhatbhate — Vehicle Rental Platform — PERN, Supabase, WebSockets

[Live: bhatbhate-v2.vercel.app](https://bhatbhate-v2.vercel.app)

- Vehicle rental marketplace for Nepal. Renters book, owners list and track their fleet, admins see both sides. Team project; Project Manager.
- Supabase Auth with Google OAuth, eSewa payments, a Gemini chatbot for recommendations, WebSocket support chat.

EDUCATION

BSc (Hons) Computer Science — Herald College Kathmandu · 2024 – Present

Languages: Nepali (native), English (fluent), Hindi (conversational)