

ANUJ PAUDEL

Kathmandu, Nepal | +977-9849274961 | anujpaudel98@gmail.com

paudelanuj.com.np | github.com/anujpaudel | linkedin.com/in/anujpaudel | youtube.com/@dimension_study

AI agent systems · applied ML · full-stack product

EDUCATION

Tribhuvan University — Institute of Engineering, Pulchowk Campus

B.E. Computer Engineering — fourth year

Kathmandu, Nepal

2023 – Expected 2027

EXPERIENCE

AI Systems Engineer (Contract)

2026 – Present

HH Enterprise

Remote

- Designed and operate a production multi-agent system running content operations for **10 brand accounts**: one orchestrator delegating to **13 specialised sub-agents**, each scoped to a single job with its own tool permissions.
- Engineered human oversight directly into the architecture — automated validators, independent reviewer agents spawned with zero producer context, bounded revision rounds, and a hard human-approval gate before anything publishes.
- Built a closed feedback loop in which measured outcomes are distilled into the agents' own instruction files; a separate maintenance agent traces failures to the responsible rule and patches it, so corrections persist instead of recurring.
- 160+** deliverables shipped end-to-end within the first five weeks of operation.

Founding Partner & Engineer — Appynox

2025 – Present

Independent product studio (founded with peers)

Kathmandu, Nepal

- Ship Android and web products end-to-end with a small team — engineering, design, store assets and growth. Released **RhinoDash** (Godot 4.5) to Google Play behind a performance-gated build pipeline: texture-memory budgets and frame-time ceilings block any regressing build.
- Operate two live web tools — a hardware-faithful **scientific-calculator emulator** and a typed **home-loan engine** — on Cloudflare, grown through a documented SEO content strategy.

Founder & Host — Dimension

2023 – Present

Education channel for Nepali engineering aspirants

YouTube

- Run an interview and guidance series demystifying Nepal's IOE entrance exam and scholarship routes — **647 subscribers**, 23 videos, ~15K views on the top guides; scripting, filming, editing and distribution in-house.
- Built the free **NEB GPA Calculator** for the same audience: **242K clicks** and **1.38M impressions** in the last twelve months (Google Search Console), peaking on national results days.

PROJECTS

Agent Fleet | *Authored AI agent skills, reference libraries, evaluation loops*

2026

- Encoded domain expertise into four operating agents (design director, video editor, web engineer, maintainer) — each with an explicit rulebook, an approval gate before expensive actions, and a catalogue of failure modes it must refuse. Added an adversarial verification pass in which independent agents attempt to *refute* each finding before it is accepted, cutting confident-but-wrong output.

Zephyr RTOS — PCF8563 driver defect | *C, C#, Renode hardware simulation* (team)

2026

- Reproduced and root-caused a BCD year-encoding bug corrupting the real-time-clock register for every year after 1999; modelled the peripheral in Renode with a custom C# validator and documented a fix with a 1970–2099 pass/fail matrix.

Dementia Care Companion | *Flutter, Django REST, geofencing*

2025

- Caretaker application with safe-zone breach alerts, appointment reminders, memory notes, and a patient-facing conversational assistant.

MoodWave | *Flutter, TensorFlow Lite, native Kotlin bridge*

2025

- Offline music player that classifies a local library by mood, energy and BPM using an on-device neural network — no network calls, no accounts, no telemetry.

TECHNICAL SKILLS

Languages: Python, Dart, JavaScript/TypeScript, C/C++, C#, GDScript, SQL

AI & ML: multi-agent orchestration, LLM tooling and API integration, evaluation/review loops, on-device inference (TensorFlow Lite, ML Kit), NLP pipelines, neural networks implemented from scratch (NumPy)

Cloud & Infrastructure: AWS (EC2, S3, VPC, IAM, RDS, Lambda — *Solutions Architect Associate*), Cloudflare Workers/Pages, Git, Linux, CI/CD

Engineering: Flutter, Django/DRF, FastAPI, Node.js, Svelte, Astro, Godot, embedded systems (Zephyr, Renode)

Creative: Premiere Pro, After Effects, Photoshop, Illustrator

CERTIFICATIONS & ACHIEVEMENTS

- AWS Certified Solutions Architect — Associate**, Amazon Web Services — issued July 2025, valid through July 2028
- CS50x & CS50p**, Harvard University via edX
- Best Presentation**, Code Camp (LOCUS) — NetVizz, real-time IP flagging and visualisation
- Hackathons:** NASA International Space Apps (3D eclipse visualiser, Three.js); KU Hackfest (YatraMate — offline QR transit payments); Hack-a-Week “Enigma 2024” (fractional-ownership matching engine)