

Skills

Hugo Nguyen

Full-stack builder and operator who leverages AI to execute with high-velocity. I specialize in zero-to-one product delivery, combining deep technical execution with product intuition. My background as an expedition leader has forged a resilience to ambiguity and a bias for calm, decisive action in high-stakes environments. I do not just write code, I orchestrate AI agents and systems to solve business problems end-to-end.

1) Core strengths

- **Deep execution with high autonomy.** Solo built multi-component products end-to-end; comfortable owning architecture, delivery, and iteration cycles.
- **Fast learning curve.** Ramp from zero → working competence in new stacks; leverage AI coding agents with guardrails (linters, CI, typed APIs, static analysis tools) to maintain quality.
- **Structured, reliable operator.** Deep-work blocks, and clear shipping cadence; automate repetitive tasks; bias to measurable outcomes.
- **Resilience under stress.** Expedition background, high tolerance for ambiguity and risk; calm decision-making in time-pressured contexts.

2) Technical stack

- **AI/LLMs:** Prompt engineering & evaluation, function-calling, router strategies (fallbacks), chain design (sequential & branching), RAG, and agentic workflows.
- **Local Inference Ops:** Linux/NVIDIA stack (CUDA, PyTorch), Hugging Face (Transformers, bitsandbytes), quantization (GGUF/AWQ), and local runners (Ollama, LM Studio).
- **Back end:** Python (FastAPI), TypeScript/Node; async task orchestration; REST/JSON; auth/session mgmt; file/DB adapters.
- **Front end:** JS/React/Next.js; component systems; typed forms; data grids; SSR/ISR; UX micro-coping; pragmatic state mgmt.

- **Engineering Standards:** TypeScript (Strict), Ruff/Pyright (Python), Biome/ESLint. **Static Analysis:** Knip (dead code/monorepo hygiene), Bandit (Python security), Snyk, Semgrep (SAST). **CI/Quality:** Husky git-hooks, CodeRabbit (AI reviews), Vitest/Playwright (E2E), and conventional commits.
- **Ops:** Docker/DDEV, Vercel/Supabase/Google Cloud/Render; logging; environment separation; secrets; basic observability.

3) Experiences

Prismind : Multi-model AI "Board of Experts" platform

- **System Architecture:** Architected a monorepo (Next.js/FastAPI) using **PNPM workspaces** and an **OpenAPI-first** workflow to auto-generate strict TypeScript contracts, eliminating frontend-backend drift.
- **AI Orchestration:** Engineered a provider-agnostic router (via **liteLLM**) handling OpenAI/Gemini/Claude with fallback strategies and structured outputs for consistent advisory plans.
- **Quality & Testing:** Enforced 99.9% resilience on critical flows via behavior-driven testing suites. Implemented **Vitest** with MSW for deterministic frontend states, **Playwright** for E2E smoke tests, and **pytest** for backend logic.
- **Security & Ops:** Secured user data via **Supabase RLS** (Row-Level Security) and integrated CI pipelines using **Bandit** (Python SAST) and **Ruff** to block non-compliant code before merge.

Grant-Match AI : discovery assistant for public funding/grants

- **What:** Targeted MVP to parse calls, normalize eligibility features, and propose ranked matches with rationale and next-action checklists.
- **How:** Scraper/ETL to a structured store; shallow ontology for eligibility; LLM scoring with guardrails; human-in-the-loop editing UI.
- **Outcome:** Cuts first-pass search time from hours to minutes; pilotable with local SMEs (La Palma) and extendable to EU-level calls.

Business tooling & websites

- **What:** Business websites and internal tools (bookings, credit/pass systems, content updates, ops automations, schedulers, invoice generators).
- **How:** Next.js/Supabase stacks; pragmatic admin UIs; payment & email integrations; minimal-maintenance hosting.
- **Outcome:** Reduced owner time on routine ops; improved conversion via clearer flows; handed-off docs for self-serve maintenance.

WhatsApp Automation Bot

- **What:** Python(FastAPI), WhatsappAPI, GeminiAPI, Google Cloud Run, workflow to handle common customer interactions and route messages for la Palma Outdoor (hiking tour business on la Palma)
- **Outcome:** Demonstrated scrappy, production-minded automation; informed later agent designs.

RLHF/LLM Training Contributor (OutlierAI)

- **What:** High-throughput prompt/response and evaluation tasks (math, coding), documenting failure modes and heuristics.
- **How (ops):** Worked ~145 logged hours over ~5 active months across ~280 tasks; average ~\$40.5/hr realized rate, with a **peak month of \$4,036 (Dec 2024)** and **total earnings \$10,869** (per earnings report). Built evaluator heuristics reused later in prompts/chains.
- **Outcome:** Rebuilt intuition for model behavior; seeded later work on eval harnesses and prompt hygiene.

Mountain Guide (Tenerife 2019–2023)

- **Scope:** Led **86 guided ascents of Mount Teide**, Spain's highest summit, with a typical **±1,400 m ascent/descent, sunset summit, and night descent** over ~10 hours.
- **Approach:** Designed routes and pacing to **maximize accessibility for less-trained clients**, providing coaching, safety briefings, and decision points.
- **Outcome:** Zero serious incidents under my leadership; repeat bookings via word-of-mouth; refined calm decision-making in time-pressured, high-risk contexts.

4) Education & self-study

- **University College Maastricht (NL)** — Focus threads: **Java programming, Artificial Intelligence, Machine Learning, Linear Algebra/Statistics**, and **Cognitive Psychology**. Sparked long-term interest in AI/psych/neuro intersections.
- **Later CS** : Harvard CS50, Mimo full-stack engineer track, **Bluedot AI Technical Safety Research**, ongoing applied systems work (agents, evals, web infra).
- **Supplemental**: Continuous reading and project-based learning in AI agents, safety/evals, and human-centered product design.

5) Languages

- **French** (native), **English** (fluent), **Spanish** (fluent), **German** (~A2).

6) Personal differentiators

- **Endurance & leadership under risk**: 4,500 km on foot in 7 months; **86 Teide ascents** with sunset summits/night descents; solo high-altitude ascents; lead roles in remote environments.
- **Psychological insight**: Psychology background, IFS-informed self-reflection; strong metacognition in feedback loops, practice meditation.
- **Values**: Truth, Freedom, Excellence, Creativity, Connection, Growth, align work with long-horizon impact.