

EXPERIENCE

Baseline Labs <i>Full Stack Developer</i>	Nov 2024 – Present <i>baselinelabs.ai · Hybrid, Galway / Stockholm</i>
- Lead developer and engineer for Baseline Labs' entire live platform, responsible for the full product: architecture, backend, scaling and DevOps, UI and design. - Built and maintain the entire backend in FastAPI over Postgres and Redis, with Stripe billing and GitHub, Google and email authentication. - Built the team and permissions model: roles, one-time invites, per-member data scoping so a member sees only the studies they are assigned, and per-member monthly spend caps drawn from the account owner's shared credit pool. - Built a streaming assistant into the product that answers from live account data, running Gemini through OpenRouter against the same internal API surface the MCP tools use. - Built the release system: named builds promoted dev to staging to production, with history, hotfix tracking and a record of what is running where. - Built first-party analytics rather than buying it, from the client-side ingest endpoint through to the admin dashboards that query it. - Built the content system, where admin-authored briefs are queued and a nightly job turns them into published posts. - Run and maintain the infrastructure directly on cloud bare metal: Docker Compose across production, staging and development, fronted by Caddy, with a self-hosted GitHub Actions runner for CI.	
Freelance Web Development <i>Engineer, Adze / Last Place</i>	Jan 2023 – Present <i>lastplace.co.uk · Hybrid, Elephant & Castle, London</i>
- Design, build and host websites for artists, musicians and small businesses, running the whole relationship from scoping and pricing through to handover, DNS and TLS. - Founded Adze in February 2025 and designed the stack: one Flask application serving 19 client domains by host-based routing, where each site's Markdown compiles to static HTML, so tenants get static-site speed behind a live dashboard. - Every tenant gets a dashboard covering content editing, password resets and generated SEO, with per-page Open Graph and JSON-LD, sitemap and robots.txt written at compile time. - Added an AI editing agent that works on a tenant's files inside a sandbox container of its own, and a federation path that lets a site live on a separate host entirely, edited over SSH through the same dashboard.	
The Honey Tree <i>Backend Developer</i>	Mar 2020 – Sep 2021 <i>Newcastle upon Tyne</i>
- Built the online ordering and delivery system during lockdown, after the business found it could not afford an external developer. - Covered subscriptions, payments and manual order entry using WordPress, webhooks and spreadsheet integration. The business still runs on it.	

PROJECTS

- Personal site and blog** gabrielpenman.com
- Design and rendering.** A client-side WebGPU compositing editor whose buffers hold OKLab rather than RGB, paired with a renderer doing camera simulation over raymarched scenes, which publishes those scenes as a dependency-free module the editor imports as live layers. design.gabrielpenman.com · render.gabrielpenman.com
- Sequence** *Open source, not for profit.* Engineering and development on a health tracking app that stores its data on the user's own device: a Flutter client against a FastAPI backend, built to a design someone else owns. sequence.gabrielpenman.com
- Fourier Neural Operators for Reverb Synthesis** *BSc dissertation.* Implemented a Fourier Neural Operator in PyTorch to synthesise room impulse responses from room parameters, following Li et al. (2021), with the dataset generator and evaluation harness alongside it.

EDUCATION

University of Huddersfield <i>MSc Artificial Intelligence</i>	Nov 2024 – Nov 2026 <i>Part time, in progress</i>
London Metropolitan University <i>BSc Computer Science, 2:1 (67.5%)</i>	2022 – 2024
York St John University <i>HNC Software Engineering</i>	2021 – 2022

SKILLS

Languages: Python, TypeScript, JavaScript, SQL, Java, Kotlin, PHP, Dart, Bash
Backend: FastAPI, Flask, Django, Node.js, PostgreSQL, MySQL, Redis, MongoDB, REST APIs, Stripe
AI and ML: PyTorch, scikit-learn, OpenAI API, Gemini API, MCP, LoRA fine-tuning, NumPy, pandas
Infrastructure: Linux, Docker, Kubernetes, nginx, Caddy, systemd, GitHub Actions, AWS, GCP, Cloudflare R2
Frontend: React, TypeScript, SCSS, Three.js, WebGPU, GLSL, HTML, CSS
Certifications: Google Cybersecurity Professional Certificate (2023)