CHRIS DORWARD

Lead Product Engineer & Monorepo Architect

Tailored for 36 Labs • Lead Product Engineer

20+ Years Engineering Rigor | Dual UK & German Passports (Unrestricted Right to Work) | Hybrid London Ready (4 Days Onsite) | Founder-Aligned (Zero Agency Drag)

CANDIDATE DIRECT CONTACT DETAILS [RECRUITER NOTE: EASILY REDACTED OR REPLACED BEFORE CLIENT SUBMISSION]

Email: goldlabel.apps@gmail.com **Phone / WhatsApp:** +44 (0) 7745 763122 **Location:** London, United Kingdom (Hybrid / Onsite)

LinkedIn: linkedin.com/in/chris-dorward **GitHub:** github.com/goldlabelapps/nx **Monorepo Framework:** nx.goldlabel.pro

Independent Product: gpxroute.pro

EXECUTIVE PROFILE & FOUNDER PARTNERSHIP MODEL

Bridging software engineering, UI/UX craft, and AI product execution

Hands-on full-stack product engineer with 20+ years of deep engineering craft, specializing in React 19, Next.js (App Router), strict TypeScript monorepos, and Python backend services. Conceived, architected, and shipped **GPXRoute°** (3D WebGL geospatial engine) 100% independently outside employment. Author of **@goldlabelapps/agent-layer** on NPM (streaming LLM tool calling). Deeply aligned with **36 Labs' mission** (UCL ML lab spinout): partnering directly with founders and ML engineers to convert advanced models into a customer-facing, high-traction self-serve creative tool. **No vibe coding, no agency drag—just battle-tested production resilience.**

36 LABS MANDATE ALIGNMENT MATRIX

Direct mapping against Mason Simmonds' specification

CAPABILITY & SPECIFICATION	PRIORITY	CHRIS DORWARD DELIVERY & TECHNICAL PROOF	LIVE PROOF
Built Independently Outside Employment Shipped product idea to customers; personal ownership of design & architecture	★ STANDOUT	Conceived, designed, built, and launched **GPXRoute** (WebGL 3D engine, GPS parsing, elevation flyovers, and modern UI) without relying on a designer.	gpxroute.pro ↗
Creative Tools & Media Interfaces AI generative/evaluative tools, canvas controls, editing outputs & real-time feedback	BONUS	Extensive experience building interactive creative canvas tools, media controls, and spatial visualizers. Intuitive UX for tuning parameters and streaming previews.	3D Route Demo ↗
Full-Stack Engineering & Ownership Build & own UI, APIs, and data models end-to-end; self-service product launch	ESSENTIAL	Proven record architecting zero-to-one SaaS apps (AskLeida, EchoPay) from relational schema modeling to micro-interactions and payments.	askleida.com ↗
TypeScript & React Fundamentals Software engineering fundamentals, component architecture, high standards	ESSENTIAL	20+ years software engineering rigor. Deep daily practice in React 19, Next.js App Router, and strict TypeScript monorepos (NX° Framework).	nx.goldlabel.pro ↗
Python / Node Backend & APIs Python/Node, APIs, PostgreSQL; close collaboration with CTO & ML team	ESSENTIAL	Scalable Python (FastAPI) backends alongside Node.js services. PostgreSQL modeling, connection pooling, and resilient REST/RPC streaming APIs.	FastAPI & Node
UI/UX & Design Engineering Intuitive journeys, layouts, and polished interfaces without relying on a designer	ESSENTIAL	Natural design engineer. GPXRoute, AskLeida, and ListingsLab designed & built directly in code with impeccable micro-interactions and accessibility.	Code-First UI/UX
AI / LLM & Streaming UX Streaming responses, long-running jobs, editing outputs, failure boundaries	HIGHLY DESIRABLE	Author of `@goldlabelapps/agent-layer` on NPM. Streaming conversational interfaces, structured tool calling, async generation queues, and fallbacks.	Agent Layer (NPM) ↗
Product Analytics & Experimentation PostHog/Sentry, event tracking, conversion funnels, session replays, feature flags	STRONGLY PREFERRED	Data-informed product engineer. Hands-on PostHog and Sentry instrumentation, tracking drop-offs, analyzing replays, and onboarding experiments.	PostHog & Sentry

CORE TECHNICAL ECOSYSTEM

Production-proven stacks and tools

Frontend & UI/UX
React 19, Next.js (App Router), TypeScript, JavaScript (ES6+), Tailwind CSS, MUI, WebGL / Three.js, Canvas APIs, PWA, Responsive Design Systems, D3.js.

Backend, APIs & Databases
Python (FastAPI), Node.js, Express, RESTful APIs, GraphQL, PostgreSQL, Supabase, Firebase / Firestore, DynamoDB, MongoDB, Redis, Webhooks.

AI, Agentic & LLM Systems
@goldlabelapps/agent-layer, OpenAI API, Anthropic Claude, Google Antigravity, Local LLMs (Ollama), Streaming UX, Structured Output, Tool Calling.

Architecture, DX & Infrastructure
Turborepo / NX Monorepos, Docker, Render, AWS (Lambda, S3, ECS, API Gateway), Vercel, CI/CD, GitHub Actions, PostHog, Sentry, Jest, Playwright.

SELECTED PRODUCT ENGINEERING & COMMERCIAL TRACK RECORD

Recent zero-to-one builds, AI platforms & scalable applications

Founder & Lead Architect — GPXRoute° (gpxroute.pro)

May 2025 – Present • Independent Product Launch

Conceived, architected, designed, and launched an independent 3D geospatial visualization product outside employment.

- Engineered a custom WebGL 3D geospatial engine rendering terrain, elevation flyovers, and interactive route animations directly in the browser.
- Implemented high-performance client-side GPS parsing (GPX, FIT, TCX) and spatial smoothing algorithms for accurate distance, pace, and elevation profiles.
- Designed the complete visual identity, typography, and micro-interactions in code without relying on an external designer.
- Instrumented telemetry and analytics with PostHog to optimize user conversion, route sharing, and rendering performance (<1.2s load time).

Next.js | React 19 | TypeScript | WebGL / 3D Canvas | Geospatial Algorithms | Tailwind CSS | PostHog | Vercel

Principal Engineer — askleida.com

May 2026 – Aug 2026 • Production Launch

End-to-end full-stack engineering for Leida MVP, an AI-powered platform generating personalized homecare recommendations for skin therapists.

- Delivered the complete product architecture from scratch across Next.js App Router, TypeScript, and server-side Supabase data models.
- Built AI recommendation generation workflows with structured JSON outputs, streaming response handling, and fallback error states.
- Integrated secure Stripe Checkout, subscription billing tiers, and resilient webhook handlers for instant therapist provisioning.
- Achieved 99.8% test coverage across critical revenue paths with automated Jest suites and zero-downtime deployment pipelines.

Next.js App Router | TypeScript | AI Recommendation Workflows | Supabase / PostgreSQL | Stripe Billing | Tailwind CSS

Fullstack Engineer (Next.js & Python FastAPI) — EchoPay

Jan 2026 – May 2026 • Contract

B2B product ordering platform with real-time Open Banking payment integration and merchant administration.

- Developed high-throughput Python (FastAPI) backend services for product catalog management, CSV bulk uploads, and automated order status synchronization.
- Engineered responsive Next.js frontend built on custom NX platform, strictly decoupled from Python backend services via OpenAPI schemas.
- Integrated EchoPay Open Banking payment flow with real-time transaction reconciliation, signature validation, and instant notifications.
- Configured and managed containerized production deployment on Render.com, implementing health checks, connection pooling, and log telemetry.

Python (FastAPI) | Next.js | Open Banking APIs | PostgreSQL | Render.com | Docker | Pydantic

Independent Software Developer & Monorepo Architect — Freelance / NX° Framework

May 2025 – Dec 2025 • Remote R&D

R&D in agentic software engineering, strict TypeScript monorepos, and open-source tooling.

- Architected and released **NX°** (nx.goldlabel.pro), an open-source monorepo template enforcing module boundaries, unified versioning, and zero lint errors.
- Published `@goldlabelapps/agent-layer` to NPM: foundational building blocks for streaming conversational AI, tool calling, and context boundary management.
- Constructed ring-fenced local LLM environments (Ollama, phi-3) with automated Python evaluation harnesses for developer workflow acceleration.

TypeScript Monorepos | NPM Package Author | Agentic Coding | Python CLI | Local LLMs | Turborepo

Frontend Developer (Next.js & Design System) — VU.CITY

Apr 2024 – May 2025 • London / Hybrid Contract

Admin Portal and internal tools for the UK's leading 3D digital twin smart-city visualization platform.

- Led frontend development of core Admin Portal and user provisioning tooling using Next.js (App Router), Firebase Auth, and Firestore.
- Architected modular frontend component library based on Material UI (MUI), standardizing UX across multiple internal applications.
- Built event-driven interfaces integrating with AWS cloud services and internal microservices. Championed accessibility, performance budgets, and unit tests.

Next.js (App Router) | Material UI (MUI) | Firebase Auth & Firestore | AWS Integration | Jest

PRIOR CAREER HISTORY & COMMERCIAL FOUNDATIONS

Proven track record across startups, scaleups & global enterprises

Full Stack JavaScript Developer & Interim Scrum Master — Dtrackt!

Jun 2021 – Feb 2024 • Malta / Remote

- Partnered directly with CTO to deliver high-performance PWAs and static web applications using Gatsby (Node + React) and Material UI.
- Integrated headless CMS architectures (Contentful, Strapi) with automated build webhooks and multi-locale content pipelines.
- Facilitated agile sprint ceremonies, backlog grooming, and cross-functional engineering alignment as interim Scrum Master.

React | Node.js | Gatsby | Contentful | Strapi | Material UI | Scrum Master

Product Lead & Senior Frontend Engineer — Wanngi • Codeworx • Rexlabs

2019 – 2020 • Brisbane, Australia

- **Wanngi (Product Lead):** Led redevelopment of health platform from legacy Angular to a modern React & Supabase platform, coordinating team delivery.
- **Codeworx (Senior Frontend Dev):** Migrated real-time poker application from CoffeeScript/jQuery to React PWA and React Native, refactoring critical game flows.
- **Rexlabs (Senior Frontend Dev):** Modernized CRM interface from legacy PHP/Knockout to React & Redux, mentoring junior developers.

React | React Native | Redux | Supabase | Legacy Migration | Team Leadership

Senior Frontend Developer — Canon Australia

Sydney, Australia • Mar 2018 – Aug 2018 (Contract)

Led frontend development of a Progressive Web App from scratch; architected state management with Redux; integrated multiple SaaS APIs.

React Developer — Boral

Sydney, Australia • Aug 2018 – Feb 2019 (Contract)

Built foundational BDD test architecture using Cucumber & Gherkin; developed React PWAs with AWS Amplify, GraphQL, and automated CI/CD.

Frontend Engineer — Aligent Consulting

Adelaide, Australia • Apr 2017 – Mar 2018

High-traffic e-commerce frontends, custom ES6 JavaScript modules, complex checkout flows, and conversion-optimized React PWAs.

Lead Developer — usTwo & Cancer Council NSW

Sydney, Australia • Jan 2017 – Feb 2017 (Contract)

Lead developer for Healthy Lunchbox app; React frontend with custom REST endpoints and decoupled WordPress backend.

Front End Software Engineer — Alcidion

Adelaide, Australia • Aug 2016 – Nov 2016 (Contract)

Real-time hospital bed management UI in React and Redux for critical clinical environments; zero-defect medical software standards.

Contract JavaScript Developer — Huawei

Shenzhen, China • Feb 2016 – May 2016

Built isomorphic JavaScript project management app using React & Node.js in small agile team; contributed to multi-locale Chinese localization.

Product Foundations & Commercial Successes — Listingslab • Ceros / FMG • Financial Systems

1999 – 2016

- **FMG / Ceros (Lead Product Developer, 2005–2006):** Conceived, architected, and built the product prototype of **Ceros**, the interactive digital publishing platform that became a global enterprise SaaS product sold commercially worldwide since 2006.
- **Listingslab (Founder / Solo Consultancy, 2007–2015):** Ran successful independent web engineering consultancy delivering full-stack solutions, custom plugins, and responsive architectures for global clients.
- **The Changing Workplace (2015–2016):** Scaled enterprise SaaS facilities management platform handling complex, high-volume datasets for enterprise clients including Microsoft and General Electric.
- **IG Index & Cantor Fitzgerald (2002–2005):** Systems Developer building real-time financial spread betting and trading user interfaces.

EDUCATION, LANGUAGES & WORK ELIGIBILITY

Education & Qualifications

BSc Psychology — Newcastle University, UK (1999)
A-Levels: Mathematics, Physics, Chemistry — Woodbridge School, Suffolk (1994)
GCSEs: 10 Subjects including English, Mathematics, and Science

Languages & Work Rights

Work Eligibility: Dual UK & German Passports (Unrestricted right to work in UK & EU). Fully available for London hybrid onsite (4 days/week).
Languages: English (Native), German (Fluent — bilingual upbringing, partial schooling in Germany), French (Conversational).

> *"Chris quickly understood business needs and identified technical problems soon after joining the team. His approach for tackling core issues was innovative and well-designed, making it so much easier for developers to maintain the app and for users to have better experiences. Not only a highly skilled full-stack developer, but also a reliable instructor and team leader that led the team with lots of support."*
>
> **— Yui Andoh, Senior Software Engineer**