

Matthew Loughnane

Ireland • Open to Remote

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Full-stack software engineer with 10+ years across enterprise and B2C products, from database architecture through to polished UI. Over the past two years I've built and shipped AI-powered features in production - conversational agents, LLM-driven configuration tools, and MCP integrations - and I'm motivated by the creative problem-solving that comes with turning complex systems into intuitive experiences. I've led end-to-end builds, passed third-party security audits, and delivered multi-tenant platforms serving real users.

SKILLS

Frontend	React, Next.js, Vite, TanStack, TypeScript, Tailwind CSS, Ant Design
Testing	React Testing Library, Playwright, Jest, Vitest
Backend	Node.js, Express, FastAPI, Drizzle ORM, Prisma, REST & API Design
AI / LLM	Vercel AI SDK, MCP Servers, Mastra Agents, Google ADK, Claude Code
Mobile	Flutter (Dart), React Native, Kotlin
Data	PostgreSQL, MySQL, MongoDB, DynamoDB, Redis, Firebase
DevOps / CI/CD	AWS, GCP, Azure, GitHub Actions, Docker, Self-hosted VPS
Architecture	Multi-tenant Systems, OAuth 2.0, Microservices, Security Audits

EXPERIENCE

Lead Software Engineer | Bridgit

2023 – PRESENT | IRELAND (REMOTE)

Tech: *Next.js, Express, PostgreSQL, Vercel AI SDK, GCP, OAuth 2.0, Drizzle ORM*

Designed and built the Bridgit platform end-to-end, an iPaaS enabling charities to collect, normalise, and transform fundraising data from any third-party platform.

- Architected the full-stack platform: Next.js frontend, Express API, and PostgreSQL database, deployed across three isolated GCP environments with robust firewall and logging configurations.
- Built and shipped a production AI agent (Vercel AI SDK and Mastra) that lets customers configure their data 'Bridges' through a natural-language chat interface, reducing setup complexity.
- Developed a React admin panel that cut platform onboarding time from 1.5 days to 2 hours, enabling non-technical staff to add new fundraising integrations independently.
- Implemented multi-tenant authentication across OAuth 2.0, Client Credentials, and API Key flows & successfully passed third-party penetration testing and security certification ahead of launch.
- Led adoption of AI-assisted development (Claude Code, CLAUDE.md agent workflows) across the engineering team, accelerating feature prototyping and test coverage.

Software Engineer (Freelance) | Hexa Studios

2023 – PRESENT | IRELAND (REMOTE)

Tech: Flutter, Dart, React, Firebase, Stripe, Node.js, Unity, MCP, Python

Founded Hexa Studios to deliver end-to-end digital products for SMBs, with a focus on emerging tech - AI conversational agents, POS hardware integrations, and cross-platform mobile apps.

- Designed and delivered a comprehensive ticket management system for island ferry services: web admin panel, customer-facing website, and cross-platform Flutter apps (iOS & Android) - processing 1,000+ bookings per week.
- Built custom Flutter applications for hardware devices including self-service touchscreen kiosks and handheld payment terminals with printing and Stripe/NFC payment support.
- Built an MCP server exposing live ferry availability data to AI clients, enabling third-party LLM integrations.
- Developed an AI conversational agent for a community mobile app, enabling users to interactively explore local stories and cultural content through natural language.
- Architected a cross-platform community app (Android & iOS) with offline-first databases, audio content, interactive maps, push notifications, and Firebase auth.
- Partnered with European organisations to deliver a higher-learning web platform integrated with a headless CMS and custom SCORM API.
- Maintained 99%+ uptime across all client projects with CI/CD pipelines for automated testing and deployment to self-hosted VPS environments.

Software Engineer | Virgin Media O2

2018 – 2023 | LONDON, UK

Tech: React, Python, PostgreSQL, Flutter, Kotlin, REST APIs

Contracted as a consultant for a critical SMSC migration programme, then expanded scope to own the reporting and tooling layer.

- Built and maintained a full-stack reporting dashboard (React frontend, custom REST API, PostgreSQL) used daily by operations and engineering teams.
- Optimised reporting pipelines from daily batch processing to under 30 minutes - a 95% reduction in turnaround time.
- Developed an internal mobile app (Flutter + custom Kotlin layer) integrated with a React web app to automate SMS workflows.

EARLIER CAREER

Advisory Services Consultant

 Freewheel (Comcast) | 2017–2018 | London

Consulted on advanced ad-tech projects for Freewheel's enterprise clients, designing strategies to expand programmatic video ad capabilities.

Product Specialist

 AppNexus | 2016–2017 | London

Provided platform-wide support and built Python Flask tools for OpenRTB troubleshooting and debugging.

Deployment Consultant

 Citrix ByteMobile | 2012–2016 | London

Deployment engineer for ByteMobile's product suite across EMEA. Commissioned servers on-site, diagnosed defects, and coordinated fixes with engineering.

Test Analyst & Designer

 Caped Koala Studios | 2011–2012 | London

Managed defect lifecycle and performed Agile test planning, reporting, and execution via JIRA.

EDUCATION

Masters in Mathematics (MMath)

 University of Reading | 2007–2011