

Stu Kennedy
Independent AI & Realtime Systems Delivery Consultant

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PROFILE

Independent consultant specialising in the time-bound delivery of AI-native and realtime systems for enterprise and public-sector organisations.

Engagements are structured around defined outcomes, including platform architecture, low-latency pipeline implementation, and transition to client ownership. I focus on shipping production systems, de-risking delivery, and exiting cleanly.

I bring deep expertise in agentic systems, realtime voice and video pipelines, and latency-critical architectures, with hands-on delivery experience across system design, model orchestration, developer experience, and operational readiness.

SELECTED DELIVERY ENGAGEMENTS (2024–Present)

Layercode (Feb 2025 – Oct 2025)

Delivered a full realtime voice-agent platform over a fixed-term engagement, enabling developers to design, deploy, and operate production voice agents.

Scope included low-latency audio pipelines, streaming ASR/TTS orchestration, and developer-focused abstractions.

Engagement concluded with platform handover and documentation.

Anam AI (Oct 2025 – Dec 2025, Consultant)

Delivered targeted architectural improvements to a realtime speech pipeline, reducing end-to-end ASR latency from approximately 2 seconds to ~350ms.

Engagement focused on streaming architecture, buffering strategy, and performance optimisation, with changes implemented and handed over to internal teams.

Medascend AI (Dec 2024 – Feb 2025)

Designed and delivered a realtime AI video training platform for medical education.

Scope included live video pipelines, AI-driven analysis, and scalable training workflows.

Engagement completed with deployment and operational handover.

Koios AI (Jun 2024 – Dec 2024)

AI Platform Delivery Lead (Consultant Engagement)

Delivered end-to-end architecture and implementation of multiple AI products for an acoustic AI company.

Built full-stack TypeScript platforms deployed on Cloudflare, with Python-based AI services running on Google Compute.

Engagement concluded following platform stabilisation and transition to client teams.

Inboxgenie (Jun 2024)

Designed and delivered an email-based AI support agent for automated handling of customer support emails, including human-in-the-loop oversight and escalation workflows.

Poppy AI (Dec 2024)

Designed and delivered an AI agent for large-scale analysis of school-to-parent email communications, supporting insight extraction and workflow automation.

CURRENT ROLES

Continuata (Mar 2010 - Present)

Independent Consultant & Director

Delivered digital platform architecture and implementation services to enterprise clients since 2010.

Designed, built, and operated AWS-based infrastructure, client software, and web platforms serving over 30 global manufacturers.

OPEN SOURCE AND COMMUNITY

HTMX Project

Core contributor and member of the HTMX development team.

Designed and implemented websocket support for HTMX 4, enabling first-class realtime application patterns with minimal frontend complexity.

PRIOR EXPERIENCE (SUMMARY)

Delivery engagements across finance, government, healthcare, and SaaS.

Work includes enterprise-scale frontend and backend platforms, AWS architecture, realtime systems, and public-sector delivery.

Clients and employers include Virgin Money, Scottish Government, IBM (NHS), Overleaf, Scottish Power, and multiple UK public-sector organisations.

TECHNICAL FOCUS

AI and Agentic Systems

Design and delivery of agent-based systems, human-in-the-loop workflows, realtime inference pipelines, and production AI platforms.

Realtime Systems

Low-latency audio and video pipelines, streaming architectures, websocket-based systems, and latency-sensitive UX design.

Cloudflare Platforms

Deep experience delivering realtime systems on Cloudflare Workers, Durable Objects, and edge-first architectures.

Platforms and Infrastructure

AWS, Cloudflare, Google Compute, Firebase, Supabase.

Production systems, dashboards, CLIs, and developer tooling.

Programming

TypeScript, JavaScript, Node.js, Python, Go, SQL.

Architecture and Systems

Strong background in functional and declarative programming, performance-critical systems, and delivery of production architectures under commercial constraints.

EDUCATION

PhD Mathematics

University of Strathclyde

Applied fluid dynamics, chaos theory, and computational modelling.

BSc (Hons) Mathematics, First Class

University of Northumbria

Focus on numerical methods, cryptography, fluid dynamics, and applied mathematics.