Samuel East

Senior Software Engineer · Products, Automation & AI

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Available immediately · Contract or permanent

SHIPPED FOR Plex · NBC PeacockTV · SkyShowTime · NowTV · Vodafone · Nagra · Yettel · Entel · OneTV

ABOUT

Fifteen years shipping complete products, most of them on my own: web platforms, iOS and Android apps, desktop tools, television apps and the hardware sitting in the room. My career has been in video, which is a demanding place to learn to build things that cannot fail quietly. I am now looking for work that uses the whole of that, including the automation, testing and physical computing side.

HOW I WORK WITH AI

Agents are how I build now, and it is the reason one engineer can ship as much as this. At Plex the whole workflow ran on them: a ticket went into Claude Code, an agent planned and wrote the change, AI reviewed the pull request, an engineer signed it off, every day, in production.

Agents are fast but not careful, so I treat the architecture as my job. I set the contracts between layers and platforms, write the way a team works into Claude skills and MCP tooling so every engineer and every agent works the same way, and put the tests first so there is a clear definition of done.

I also built my own AI coding terminal, a desktop app in Rust and TypeScript, and use it to ship iOS, Android, desktop and web products on a single API.

SKILLS

Languages & Frameworks: TypeScript, JavaScript, React, React Native, Node.js, Swift, Kotlin, Angular, ElectronJS, LightningJS

Tooling: Git / GitHub / GitLab, Jira, Linear, Sentry, Conviva, Jest, Vitest, Xcode, Android Studio, Agile / Scrum, Claude Code, MCP, Codex

AWS Infrastructure: EC2, Auto Scaling Groups, ELB / ALB, RDS, VPC, Bastion Hosts, S3, CloudFront, Lambda, IAM, Route 53

React Native: New Architecture, TurboModules, Nitro Modules, Reanimated, Gesture Handler, Zustand, React Query, Metro, Maestro E2E, Storybook, pnpm / Turborepo monorepo

Mobile, TV & STB Platforms: iOS, tvOS, Android, Android TV, Fire TV, Samsung Tizen, LG WebOS, Hisense Vidaa, Custom STBs, DVB / OIPF

Video Players: Shaka Player, AVPlayer, ExoPlayer / androidx-media, KSPlayer (FFmpeg), DashJS, HLS.js, Custom MSE, CastLabs, Bitmovin, VideoJS

Also: Widevine, PlayReady, FairPlay, BuyDRM, EZDRM, SPEKE API, CENC / CBCS, CMAF, MediaLive, MediaPackage, MediaConvert, MediaTailor, MediaConnect, CloudFormation, SSAI, CSAI, AWS MediaTailor, Manifest stitching, SCTE-35, VMAP, VAST, Google IMA SDK, FAST channels, Pause ads, Live catch-up

EXPERIENCE

Plex

Aug 2026 – Oct 2026 · Permanent

Senior Software Engineer · Player Team (most recent)

Player team engineer on Plex's cross platform React Native client, shipping one TypeScript codebase to iOS, tvOS, Android, Android TV, Fire TV, Samsung Tizen and web, with native Swift and Kotlin underneath. My role was eliminated in October 2026 when Plex cut 24 positions and restructured its development teams, a company wide decision rather than anything to do with the work.

APPS & ENGINEERING

- Pinned the Android navigation bar hidden behind the OSD using react-native-edge-to-edge, including a patch to react-native-safe-area-context for a stale inset bug on Android 10
- Delivered inside a fully AI driven workflow, writing custom Claude skills, MCP tooling and plugins so generated code stayed reviewable and grounded

6 QUALITY & ANALYTICS

- Built plex-test, a Claude Code plugin that drives a real device or simulator through a library, measures start time, seeking and sustained playback against an adb audio counter, then scores the run and renders it in a dashboard
- Added playback metrics for the skip buttons

5 PLAYBACK

- Extracted the native playback layer into a standalone PlexPlayerSDK across Swift and Kotlin, a 134 file refactor, with a reference app and an automated SDK boundary check wired into CI
- Worked across three playback engines: AVPlayer and KSPlayer (FFmpeg based) on Apple, ExoPlayer and androidx-media on Android, including engine selection by codec and content type
- Rebuilt the seek path so the dpad, the remote's seek buttons and double tap gestures all run one implementation on Apple TV, Fire TV and Android, coalescing bursts of step seeks into a single engine seek to stop playback stalling minutes behind

3SS

Mar 2024 – Mar 2026 · Contract

Senior Software Engineer · Vodafone

Built Vodafone's next generation set top box from the ground up. Also worked across Yettel, Entel, and OneTV, delivering live, catchup, start over, channel switching, on demand, and recordings. Worked closely with Nagra on DRM and content protection integration. Helped the team hit critical launch deadlines, working remotely from the UK.

APPS & ENGINEERING

- Built high performance UI with LightningJS optimised for low end STB hardware

6 QUALITY & ANALYTICS

- Reduced zapping times and improved playback resilience through KPI driven optimisation
- Developed stall detection and custom debug UI for memory diagnostics
- Created remote development suite using ZeroTier & Raspberry Pi for real time STB access

5 PLAYBACK

- Architected DVB/OTT playback switching using Shaka Player with seamless protocol handoff

NBC PeacockTV

Mar 2022 – Mar 2024 · Contract

Senior Software Engineer

Worked across PeacockTV, SkyShowTime, and NowTV. Focused on video start times, rebuffering reduction, and cross platform delivery at scale.

APPS & ENGINEERING

- CVSDK development in TypeScript with Jest and CI integration

6 QUALITY & ANALYTICS

- KPI monitoring and performance optimisation using Conviva (VST, VSF)
- Memory and CPU profiling on low end Samsung and Xfinity Xi3/Xi6 devices

5 PLAYBACK

- MSE based playback and mid stream adaptive bitrate capping

S3Bubble

2014 – 2021 · 7 years

Founder & CEO · AWS Certified

Founded and scaled a cloud media streaming platform on AWS, distributing millions of video players monthly via API. Built the full product stack end to end, from encoding tools and DRM protected playback to the underlying Amazon infrastructure: large RDS databases, EC2 Auto Scaling groups behind Elastic Load Balancers, bastion hosts inside hardened VPCs for secure access, and the full AWS Media stack. AWS Certified, with hands on experience running production services at scale.

APPS & ENGINEERING

- AngularJS media streaming application integrated with AWS cloud workflows

2 CLOUD & INFRASTRUCTURE

- Architected resilient AWS infrastructure: RDS (MySQL/Postgres) at scale, EC2 Auto Scaling groups, ELB / ALB load balancers, multi AZ VPC with bastion hosts and IAM hardened security
- Production live streaming workflow with MediaLive, MediaPackage, and OBS integration
- Fully automated CloudFormation stack that spun up complete live streaming setups on demand, covering MediaLive channels, MediaPackage endpoints, IAM, networking, and DRM wiring

SIDE PROJECTS

Built and shipped on my own time. The full set is at samueleast.co.uk.

Claw Machine

Write-up

A real arcade claw machine you can play over the internet. The gantry came from Alibaba, the cabinet from an arcade dealer, and the controls are driven remotely with a camera inside for the view.

Boat Controller Lighting App

Write-up

iPhone lighting control for high end yachts. The app speaks Art-Net over UDP to the colour wheel controller on board, driving every light on the boat over its own network with no cloud and no internet in the loop.

Built with: Appcelerator Titanium, JavaScript, iOS, UDP sockets, Art-Net

Vybe Coding

Website iOS Android Mac Windows Write-up

AI coding terminal. The desktop app runs your coding agents, and the phone app picks up the same sessions so you can keep working away from your desk.

Built with: Tauri (Rust), React, xterm.js, whisper.cpp, SwiftUI, Kotlin

Audibase Website iOS Mac Windows

Marketplace for creators selling AI generated music. Listeners preview for free and buy the full quality master to keep.

Built with: Next.js, Hono, Electron, SwiftUI, Kotlin, Firebase, Stripe, R2

Pennlo Website

Open banking app for UK limited company directors who find accounts and tax confusing. It reads your business bank account and Penny, the AI assistant, explains in plain English what you owe, when, and how much to put aside.

Built with: Next.js, SwiftUI, TrueLayer, Claude, HMRC APIs

TVProber Website Mac Write-up

Desktop developer suite for LG webOS and Samsung Tizen TVs. Deploy, inspect and debug TV apps on real sets without the SDK ceremony.

Built with: Electron, Express, FFmpeg, MediaMTX, WebRTC

EDUCATION AND CERTIFICATION

Swansea Metropolitan University · BA Hons Interactive Digital Media, 2:1 2007 – 2009

Swansea College, Tycoch · BTEC National Diploma Music Technology, DMM 2003 – 2005

AWS Certified · Cloud Practitioner, with production experience at scale