

# Samuel East

## Senior Full Stack TypeScript Engineer | AWS Cloud Architecture | Scalable SaaS Platforms

Barry, South Wales, UK

Portfolio: <https://samueleast.co.uk>

Projects: <https://sobytes.com/projects>

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Senior software engineer with 15+ years of experience building scalable cloud platforms, SaaS products, media systems, APIs, desktop applications, and cross platform applications. Strong background in TypeScript, Node.js, AWS, ElectronJS, React, and cloud infrastructure at scale.

Founded and scaled multiple products and platforms, including media streaming systems serving millions of video player deliveries globally. Experienced across the full product lifecycle including architecture, backend APIs, frontend applications, infrastructure, scaling, CI/CD, cloud automation, and production operations.

Extensive experience working in high performance engineering teams across OTT streaming, Smart TV platforms, DRM systems, cloud media workflows, and scalable AWS infrastructure.

Comfortable leading projects from concept to production, collaborating with distributed teams, mentoring developers, and rapidly prototyping new ideas.

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## Core Technologies

TypeScript, JavaScript, Node.js, React, Next.js, AngularJS, ElectronJS, PHP, REST APIs, AWS, Lambda, ECS, EC2, Auto Scaling Groups, Load Balancers,

CloudFormation, Terraform, MediaConvert, MediaLive, MediaPackage, MySQL, PostgreSQL, MongoDB, Redis, Git, CI/CD, Jest, Docker, Video Streaming, HLS, DASH, DRM, MSE, EME, Smart TV Development, Tizen, webOS

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## Key Achievements

- Founded and scaled S3Bubble, a cloud media streaming platform serving millions of video player deliveries globally
  - Architected scalable AWS infrastructure including Auto Scaling Groups, Load Balancers, VPCs, RDS, IAM security, and automated media workflows
  - Worked on large scale OTT platforms including PeacockTV, SkyShowTime, NOW TV, Vodafone TV, Yettel, Entel, and OneTV
  - Built ElectronJS desktop applications for media encoding, streaming workflows, and creator tooling
  - Developed studio approved DRM workflows using Widevine, PlayReady, FairPlay, BuyDRM, EZDRM, and AWS SPEKE
  - Built scalable live streaming systems using AWS MediaLive and MediaPackage
  - Created remote Smart TV debugging infrastructure using Raspberry Pi and ZeroTier for distributed engineering teams
  - Optimised playback performance and video start times across Samsung, Xfinity, Web, and STB platforms
  - Designed and maintained APIs and SaaS products used by thousands of users and businesses
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## Professional Experience

### 3SS

Senior Software Engineer  
February 2024 – April 2026  
Remote, United Kingdom

Worked on next generation OTT and set top box platforms for Vodafone TV, Yettel, Entel, and OneTV. Focused on scalable media playback systems, Smart TV platforms, DVB/OTT switching, performance optimisation, and production delivery.

Responsibilities and achievements:

- Architected DVB and OTT playback switching workflows using Shaka Player
- Built high performance UI applications using LightningJS for low end STB hardware
- Implemented Live, Catchup, StartOver, TimeShift, DVR, and VOD playback workflows
- Improved playback KPIs including zapping times, startup performance, and resilience
- Built remote development and debugging systems using ZeroTier and Raspberry Pi devices
- Developed memory diagnostic tools and custom debug interfaces
- Ported applications to Samsung Tizen with minimal codebase changes
- Worked closely with DRM and content protection systems including Nagra integrations
- Participated in architecture discussions, sprint planning, technical reviews, and production releases

Technologies: TypeScript, JavaScript, LightningJS, Shaka Player, Tizen, Smart TV, DVB, OTT, GitLab CI/CD

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## **NBC PeacockTV / SkyShowTime / NOW TV**

Senior Software Engineer  
March 2022 – March 2024  
Remote, United Kingdom

Worked across large scale OTT streaming platforms delivering high performance playback experiences across Web, Samsung TVs, and Xfinity devices.

Responsibilities and achievements:

- Optimised Video Start Time (VST) and playback performance across multiple platforms
- Reduced rebuffering and playback failures on low end devices
- Worked with DASH, HLS, MSE, and EME playback systems
- Implemented BrightLine advertising and adaptive bitrate workflows
- Performed CPU and memory profiling on Samsung and Xfinity hardware
- Built and maintained TypeScript based streaming applications and playback SDKs
- Used Conviva analytics for KPI monitoring and playback diagnostics
- Contributed to CI/CD workflows, code reviews, technical documentation, and sprint delivery
- Developed AAMP based playback solutions for Xfinity X1 devices

Technologies: TypeScript, JavaScript, React, Jest, DASH, HLS, MSE, EME, Conviva, Samsung Tizen, Xfinity, AAMP

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## **S3Bubble**

Founder & Technical Director  
2014 – 2021  
Cardiff, Wales

Founded and scaled a cloud based media streaming platform focused on video hosting, encoding, DRM, live streaming, and OTT delivery.

Led all areas of the platform including architecture, backend APIs, frontend applications, cloud infrastructure, desktop tooling, automation, and customer workflows.

Key achievements:

- Built and scaled a media streaming platform serving millions of video player deliveries monthly
- Architected AWS infrastructure using EC2, ECS, Auto Scaling Groups, Load Balancers, RDS, VPCs, IAM, Lambda, and CloudFormation
- Built automated media encoding workflows using AWS MediaConvert and Lambda

- Developed studio approved DRM workflows using SPEKE, Widevine, PlayReady, and FairPlay
- Built scalable live streaming infrastructure using MediaLive and MediaPackage
- Created ElectronJS desktop encoding applications supporting HLS, DASH, subtitles, thumbnails, encryption, and media processing
- Built APIs and OTT workflows used by customers to create streaming platforms
- Delivered WordPress OTT themes, plugins, and media management systems
- Managed production infrastructure, deployments, monitoring, customer support, and scaling

Technologies: Node.js, TypeScript, ElectronJS, AWS, Lambda, MediaConvert, MediaLive, MediaPackage, CloudFormation, VideoJS, Shaka Player, PHP, MySQL

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## **SoBytes**

Founder / Technical Director

2013 – Present

United Kingdom

Built a digital product and software company focused on mobile applications, cloud systems, audio platforms, and SaaS products.

Developed and managed a wide range of products across web, desktop, mobile, and cloud environments.

Projects included:

- Audibase audio collaboration platform
- OTNet media streaming platform
- Cross platform mobile applications
- Media encoding tools
- WordPress plugins and SaaS systems
- Audio streaming and creator tools
- Real time media workflows

Technologies: Node.js, JavaScript, ElectronJS, React, AngularJS, PHP, AWS, MySQL, Mobile Development

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## **YouTube Streamer Mobile App**

Cross platform mobile streaming application built for iOS and Android, designed to simplify live streaming workflows and video broadcasting.

Features included:

- Mobile live streaming workflows
- YouTube streaming integration
- Real time broadcasting functionality
- Cross platform mobile development
- User focused streaming experience

Technologies: Swift, Android, iOS, Video Streaming

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## **Audibase**

Audio collaboration and creator platform allowing artists to upload, collaborate, stream, and share audio content.

Features included:

- Audio uploads and streaming
- Social sharing and embeds
- Audio collaboration workflows
- Media processing and cloud storage
- API driven architecture

Technologies: Node.js, AWS, APIs, MySQL, Media Processing

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## **OTNet**

Media streaming platform focused on helping customers launch and manage OTT streaming services.

Features included:

- Video hosting and monetisation
- HLS and DASH streaming
- DRM workflows
- API based OTT platform management
- Media encoding and playback

Technologies: Node.js, AngularJS, AWS, VideoJS, APIs

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## **ElectronJS Streaming Desktop Application**

Desktop application built for encoding and packaging media content to HLS and DASH.

Features included:

- Adaptive bitrate encoding
- Subtitle conversion
- Thumbnail generation
- Bulk uploads
- Media trimming
- Encryption workflows
- AWS upload integration

Technologies: ElectronJS, Node.js, FFmpeg, AWS

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## **AWS Live Streaming Workflow**

Cloud based live streaming infrastructure using AWS MediaLive and MediaPackage.

Features included:

- Live ingest via OBS
- DVR and StartOver functionality
- Live rewind support
- VOD archive generation
- Automated cloud provisioning

Technologies: AWS MediaLive, MediaPackage, Lambda, VideoJS

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## **GoBeyond Medical Mobile App**

Cross platform medical application built for healthcare professionals featuring charts, trackers, questionnaires, reminders, and calendar functionality.

Role: Lead Developer

Company: Emotive

Location: London

Technologies: Appcelerator Titanium, Alloy, Android, iOS, Mobile Development

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## **Mepact Medical iPad App**

Internal healthcare and eLearning iPad application developed around cancer research and training workflows.

Features included:

- Interactive eLearning experiences
- Parallax based UI interactions
- Healthcare focused educational content
- Internal enterprise application workflows

Company: Emotive

Technologies: Appcelerator Titanium, iOS

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## Virgin Care Website

Healthcare focused website platform built using WordPress CMS with advanced search functionality and custom backend development.

Company: Emotive

Technologies: WordPress, PHP, MySQL

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## Urology Medical Cross Platform Mobile App

Cross platform healthcare application developed for internal medical use, allowing patients to track urine intake and health related metrics with advanced charting and PDF reporting functionality.

Features included:

- Patient tracking workflows
- Advanced PDF generation
- Data visualisation and charts
- Cross platform mobile development
- Internal healthcare tooling

Company: Emotive

Technologies: Appcelerator Titanium, Android, iOS, Hyperloop

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## Lumishore Boat Controller App

iOS application for controlling yacht lighting systems via network protocols and socket communication.

Technologies: Appcelerator Titanium, iOS, UDP, Socket Connections

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## Earlier Career

Earlier roles included mobile application development, WordPress development, SaaS product development, and cross platform application engineering across multiple agencies and startups.

Worked with:

- Appcelerator Titanium
- WordPress
- PHP
- MySQL
- JavaScript
- Mobile applications
- Cloud integrations
- API development

Companies included:

- Emotive
  - Lumishore
  - Object Matrix
  - FK Create
  - MLC
  - Abannan
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## Education

### Swansea Metropolitan University

BA (Hons) Interactive Digital Media, 2:1  
2007 – 2009

### Swansea College

BTEC National Diploma in Music Technology  
Triple Distinction / Merit  
2003 – 2005

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## Certifications

AWS Certified Cloud Practitioner

[https://www.credly.com/badges/5946ca97-7a5c-4290-b97b-787052a0059e/public\\_url](https://www.credly.com/badges/5946ca97-7a5c-4290-b97b-787052a0059e/public_url)