Julian Tellez

Senior Software Engineer

Distributed Systems & Cloud-Native Specialist

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Senior Software Engineer specialising in high-throughput distributed systems and cloud-native architectures. Over 8 years of experience building resilient, real-time event-driven services (Go, Rust, Node.js) and low-latency infrastructure. Expert in scaling Kafka-backed pipelines and orchestrating asynchronous network services for millions of daily users.

EXPERIENCE

Senior Software Engineer ITV

Mar 2025 to Present

The largest commercial television network in the UK, broadcasting and streaming news, entertainment, drama and live events via ITVX.

- Engineered playback splitting to serve optimised players by device capability, cutting bundle size from 1MB to 300KB gzip and improving load times.
- Built ad-block detection and deterrence, protecting and increasing advertising revenue.
- Contributed to the migration from Shaka Player to TheoPlayer, improving playback performance and features.
- Prepared the platform for high-traffic live events including the World Cup, ensuring stable streaming.

Shaka Player, TheoPlayer, hls.js, MPEG-DASH, HLS, TypeScript, React, Webpack, Jest, Cypress

Senior Software Engineer castLabs

Sep 2024 to Mar 2025

A provider of secure digital video delivery: multi-DRM licensing, cross-platform player SDKs and content protection.

- Prototyped Server-Guided Ad Insertion (SGAI) for DASH (DASH-XLink) and HLS (EXT-X-DATERANGE interstitials), evaluating cross-platform compatibility for live and VOD.
- Explored hybrid ad-insertion architectures to inform future monetisation and seamless user experience.

castLabs Player, MPEG-DASH with DASH-XLink, Apple HLS interstitials, TypeScript, React, Webpack, Jest

Senior Software Engineer Sky

Jan 2023 to Sep 2024

A leading British broadcaster and telecommunications company.

- Developed Adaptive Bitrate Streaming (ABR) algorithms, improving playback quality and reducing buffering.
- Enhanced bandwidth estimation and request efficiency, reducing time to first byte and playback latency.
- Implemented buffer-management strategies to improve streaming across Chromium browsers.

React + Hooks, TypeScript, vanilla JS, Webpack, Sass, Selenium, Node.js (Express)

Senior Software Engineer Utility Warehouse

Dec 2019 to Dec 2022

A multi-service provider bundling home services into one bill.

- Engineered real-time communication and payment services handling 1M+ daily events via Kafka and Kubernetes, improving system throughput and observability using Prometheus and Grafana.
- Leveraged cloud-native technologies (Kubernetes, Docker, Kafka) for scalable, resilient architectures.
- Ran proactive monitoring and resolution with Prometheus and Grafana.

React + Hooks, GraphQL, TypeScript, Kubernetes, Docker, Kafka, Terraform, Go, CircleCI, GitHub Actions, Drone, AWS, GCP

Software Engineer DAZN

Sep 2017 to Dec 2019

A leading live and on-demand sports streaming service.

- Optimised HTML5 video playback across Xbox, SkyQ, FireStick, smart TVs and web, reaching millions of users.
- Developed and maintained video players (Shaka, hasplayer, dashplayer, exoPlayer).
- Contributed to streaming-protocol, CDN and playback-metrics architecture.

React, RxJS, MobX, TypeScript, Webpack, Sass, Serverless, Docker, Terraform, Node.js, Go, Drone, Jenkins, AWS

Software Engineer **Plentific** Oct 2015 to Sep 2017

A property management platform.

- Developed isomorphic landing pages to improve user experience and performance.
- Built a React-based email service to streamline communications.
- Contributed to a B2B dashboard and payments service for enterprise users.

React, Redux, Webpack, Sass (BEM), Docker, Kubernetes, Node.js (Hapi.js, Express), Jenkins, AWS

SKILLS

Backend	Rust, Kafka, Node.js (Express, Hapi.js), Go (Protobuf + gRPC)
Cloud & DevOps	Kubernetes, Docker, Terraform, AWS, GCP
CI/CD & Observability	CircleCI, GitHub Actions, Drone, Prometheus, Grafana
Video Streaming	Adaptive Bitrate Streaming (ABR), playback optimisation, video players (Shaka, TheoPlayer, castLabs, exoPlayer)
Streaming Protocols	MPEG-DASH, HLS, streaming heuristics, CDNs
Frontend	React, TypeScript, GraphQL, vanilla JavaScript (ES5-13)
Testing & Debugging	Cypress, Selenium, Charles Proxy, Wireshark, Jest

EDUCATION

Middlesex University, London BSc Procedural programming (applied to sound), MatLab, DSP 2010 - 2013

SAE Institute, London Audio Engineering Diploma Audio production, creative work 2010 - 2012

LANGUAGES

English (Fluent) Spanish (Native)