

Samuel East

About me

For the past two years, I've had the privilege of working with PeacockTV, a leading streaming service in America, on highly technical projects—a role that I've wholeheartedly embraced and thoroughly enjoyed. With over 15 years of extensive experience in media streaming and development, I have consistently excelled in dynamic and entrepreneurial environments, always eager to collaborate with forward-thinking professionals and continually expand my skill set.

My true devotion lies in the creation of applications that facilitate connections and empower individuals to share their creative expressions. My expertise extends to proficiently utilizing Amazon Web Services (AWS) to engineer fully scalable applications, seamlessly integrating APIs, and enabling efficient bulk media storage and streaming.

Skills

Javascript, Typescript, Jest, Node, React, Angular, ElectronJS, Amazon Web Services, Appcelerator, APIs, MySQL, MongoDB, CSS, HTML5

Software: Git/Gitlab, Jira, Visual Code Studio,

Development Method: Agile

Certifications

AWS Certified Cloud Practitioner

https://www.credly.com/badges/5946ca97-7a5c-4290-b97b-787052a0059e/public_url

Experience

Name:

Media Streaming

Company:

NBC PeacockTV

Description:

During my time at NBC PeacockTV, I had the privilege of contributing to various groundbreaking initiatives across the NBC network, including PeacockTV, SkyShowTime, and NowTV. Our primary objective was to deliver a superior media streaming service that outperformed the competition, prioritizing a lightning-fast VST (Video Start Time), zero rebuffering, and a seamless content delivery experience.

My role encompassed a wide array of responsibilities, ranging from implementing brightline ads and media tailor solutions to introducing mid-streaming bitrate capping and DVR restrictions. I also conducted feature tests, performed memory and CPU data analysis, and engaged in numerous other critical tasks to enhance the streaming experience.

Our cross-functional team worked diligently across multiple platforms, with a strong focus on Web, Xfinity, and Samsung. I took an active role in monitoring and optimizing key performance indicators (KPIs), addressing issues on low-end devices such as Samsung 2017/2020 and Xi3/Xi6 to ensure a consistent and enjoyable viewing experience for all users.

On a daily basis, I leveraged the CVSDK, which is developed in Typescript, to raise and review pull requests (PRs) and ensure their seamless integration through our continuous integration (CI) pipeline. Rigorous unit testing using Jest was an integral part of our development process, guaranteeing the reliability and stability of our codebase.

I found immense satisfaction in fostering effective communication within our team through the creation of video tutorials and comprehensive documentation, further enhancing our collective understanding of complex concepts and technologies.

Participating in daily stand ups, joining and contributing to technical meetings doing presentations to the whole team and also on our weekly tech forums.

Features:

- DASH, HLS MSE & EME
- Updating & Maintaining our Ref App Built in React
- KPI (VST, VSF) & bug finding with Conviva
- Samsung TV Development with Tizen studio
- Aamp development for X1 Xfinity devices
- Live streaming developments DVR, Live Edge
- Comprehensive documentation creation
- Feature testing locally
- Subtitles and captions
- Bitrate Switching & Mid stream bitrate capping

Technologies:

Typescript, JavaScript, Jest

Links:

<https://www.peacocktv.com>

Name:

Media Encoding Desktop Application

Company:

S3Bubble

Description:

This app was built with ElectronJS. The main task of the app is to encode your media content to HLS Adaptive Bitrate and upload to AWS or Store locally. Encryption can be added to prevent your content from being downloaded.

Features

- HLS Encryption
- Folder Or single Uploads In Bulk
- Trim Media
- Trim/Crop Images
- Grab Screenshots
- Convert AWS Transcribe JSON To SRT
- Convert SRT/VTT Or VTT/SRT
- Extract Audio From Video For AWS Transcribe Services
- Conversion Tool To Create AAC/MP3/MP4 etc
- Add ID3 Meta To Audio Files
- Generate Bif Thumbnails For Roku Or Player
- Get File Information
- Encode And Upload To AWS
- Encode And Save Locally To Your Computer

Technologies:

NodeJS, ElectronJS, Javascript, IOS, Windows, Ffmpeg

Links:

<https://s3bubble.com/aws-encoding-desktop-app>

Name:

AngularJS Web Application

Company:

S3Bubble

Description:

Building a web application with AngularJS framework that integrates with Amazon Web Services to run Media Streaming workflows in the cloud. Creating cost effective streaming solutions for SMEs.

Built with Angular JS and the AWS PHP SDK utilizing many advanced OTT workflows.

Technologies:

AngularJS, AWS (Amazon Web Services), Javascript

Links:

<https://s3bubble.com>

Name:

VideoJS Plugin Prototype

Company:

Object Matrix <https://object-matrix.com>

Description:

The goal was to build a VideoJS plugin that can clip on prem videos utilizing bif thumbnails with timeframe specific clipping that can then be sent to another service to archive the video for playback. Functionality was added to create thumbnails via nodejs and ffmpeg.

Technologies:

VideoJS, NodeJS, Javascript, Ffmpeg

Links:

<https://samueleast.com/portfolio/prototyping-with-object-matrix>

Name:

AWS Cloudformation & Lambda Encoding Workflow Template

Company:

S3Bubble

Description:

Building a Cloudformation template and lambda function in NodeJS. Two AWS S3 buckets are created, one that watches for content changes and fires a Lambda function to encode the media to HLS or DASH via MediaConvert.

Technologies:

AWS, Lambda, MediaConvert, Cloudformation

Links:

<https://s3bubble.com/documentation/cloudformation-user-driven-template-create-user-powered-media-streaming-wordpress-themes/>

Name:

AWS Production Live Streaming Workflow

Company:

S3Bubble

Description:

Building a Live Streaming workflow in the cloud using MediaLive in combination with MediaPackage. The Live Stream is created via OBS software and ingested into MediaLive a start-over time can be implemented with date ranges to allow for live rewind to the beginning of the live stream. The stream is played using VideoJS, after the stream has been finished a harvest job can be created to create VOD hls assets for playback for an archive.

Technologies:

AWS, MediaLive, MediaPackage, VideoJS,

Links:

<https://www.youtube.com/watch?v=LidiIUExN4&list=PLC2Z78VyD-JArC1poCDTZTbANLHJnfks8>

Name:

Studio Approved DRM (Digital Right Management)

Company:

S3Bubble

Description:

Building a player to work with third party license servers to provide studio approved DRM using AWS Secure Packager and Encoder Key Exchange (SPEKE) API adapting a cloudformation template for ease of use.

Technologies:

AWS, MediaConvert, Widevine, Playready, Fairplay, VideoJS,

Links:

<https://s3bubble.com/documentation/ezdrm-cloudformation-template-setup-drm-widevine-playready-fairplay-with-s3bubble/>

Name:

VideoJS Waveform Plugin

Company:

S3Bubble

Description:

Building a video js waveform plugin to work with hls using canvas to create the visual waveform and the web audio api to generate the data and store it as json using ElectronJS.

Technologies:

NodeJS, VideoJS, Javascript

Links:

<https://s3bubble.com/documentation/new-audio-waveform-player>

Name:

Customizable OTT Media Streaming Themes

Company:

S3Bubble

Description:

Building a full ott wordpress theme that works with elementor and has all functionality for all aspects of media streaming.

Technologies:

WordPress, PHP, VideoJS, Javascript, AWS

Links:

<https://wpott.tv>

Name:

Media Streaming API

Company:

Otnet.tv

Description:

helping users distribute, manage and monetize their video content. In other words - we make it easy to create your own Netflix, Prime, Hulu or iPlayer competitor, while you concentrate on finding and building your audience.

Technologies:

Codeignitor, PHP, AngularJS, VideoJS, Javascript, AWS

Links:

<https://otnet.io/#introduction>

Name:

Youtube Streamer Mobile App

Company:

SoBytes

Description:

YT Streamer is an application that is designed to stream videos for you. Recently, YouTube has introduced a feature that allows users to go online whenever they want to. In order to make things easier and quicker for an audience, it is a good option to use a streaming app which will work easily. YT Streamer is an application which you can download from your App Store for free. It is also simple and easy to use, designed to bring a decent experience to its users.

Technologies:

Xcode, Swift, Videocore

Links:

<https://samueleast.com/portfolio/yt-streamer-powerful-live-streaming-directly-to-youtube>

Name:

Lumishore Boat Controller App

Company:

Lumishore

Description:

Lumishore builds in house products for LED lighting around yachts. They needed a mobile app built to connect with their colour wheel EOS controller.

This project involved building an iPhone mobile application that connects via UDP socket

connections to a boat controller to allow the app to control all the light around the boat.

Technologies:

Titanium Appcelerator, IOS, UDP Protocol, Socket Connections, Art Net Protocol

Links:

<https://samueleast.com/portfolio/lumishore-boat-lighting-company>

Name:

Shake Locate Cross Platform Mobile App

Company:

SoBytes

Description:

Shake Locate is a location based cross platform app. Shake your phone and find your location.

Technologies:

Appcelerator, Alloy, Android, IOS

Links:

<https://shakelocate.me>

Name:

Urology Medical Cross Platform Mobile App

Company:

Emotive

Description:

Building a cross platform mobile app for internal use using Appcelerator allowing the ability for patients to track their urine intake with advanced pdf and chart functionality.

Technologies:

Appcelerator, Android, IOS, Hyperloop

Links:

<http://www.astellas.co.uk>

Name:

Mepact Medical iPad App

Company:

Emotive

Description:

Building an iPad app with parallax features for internal elearning based around cancer research.

Technologies:

Appcelerator, IOS

Links:

<http://www.cancerresearchuk.org>

Name:

Virgin Care Website

Company:

Emotive

Description:

Building a website with WordPress CMS integrating advanced search functionality.

Technologies:

WordPress, PHP

Links:

<http://www.virgincare.co.uk>

Name:

GoBeyond Medical Mobile App

Company:

Emotive

Description:

Building a cross platform mobile app using Appcelerator for the medical profession with charts (trackers) questionnaires, reminders and calendar.

Technologies:

Appcelerator, Alloy, Android, IOS

Links:

<http://www.gilead.com>

Education

Swansea Metropolitan University 2007 - 2009

Degree in Interactive Digital Media Awarded BA Hons 2:1

Swansea College, Tycoch, Swansea 2003 - 2005

National Diploma in Music Technology Awarded BTEC, Triple Grade Distinction, Merit,
Merit GCSE's 9 passes at AC grade

John Colet School, Wendover, Buckinghamshire 1994 – 1998

O level's Pass (Includes English, Maths, Sciences)