



EXPERIENCE



Feb. 2019 – Present

Software Engineer (Full Stack)

DAZN is a Sports Streaming Company and broadcasts live sport events to millions of consumers in territories around the globe.

My Team at DAZN was focused on building a strategic reusable platform for internal tooling and dogfooding that platform to deliver the first applications on it.

To that end – we built a platform for hosting micro-frontends using *Single SPA* and *SystemJS* that allowed for teams to independently release changes to their application without affecting other teams. We also delivered several core modules such as User Management, a Media Library system for the entire company, and a centralised *GraphQL Federated Gateway* service that provided a single data graph spanning over all the released applications on the platform.

My team and I were also responsible for championing the design and implementation for a reusable Software Development Kit, including a fully-fledged Design System in *Typescript* – We worked closely with the UX and UI team to create a set of components in *React* that could be used in the individual applications so that users had a consistent experience regardless of the application they were using.

We were also responsible for ensuring that the platform we built could scale to burst loads that supported hundreds of thousands concurrent viewers. To that end, we implemented a highly scalable architecture utilizing various services in the *Amazon Web Services (AWS)* repertoire including: *Lambda, ECS, Fargate, S3, Cloudfront, RDS Aurora Postgres* and *Kinesis*.



Jul. 2016 – Jan. 2019

Software Engineer

At Sky, I worked to deliver customer-centric web experiences that allowed customers manage their account. My team and I were responsible for the Billing, Payments, Account Management, and Upsell journeys on the sky.com website, and supporting web-views within the Sky Android/iOS apps. My team's primary focus was to reduce call centre load and increase goal achievement. We employed various optimization techniques such as multivariate testing and user labs. This resulted in significant KPI improvements during my time at Sky.

I was a primary contributor to many of Sky's development frameworks. This includes backend GraphQL APIs, and frontend frameworks focused around *React* and *Vue*.

My team was also responsible for the maintenance of a host of legacy applications. Working on these required working with technologies such as *Ruby, Java, Elixir* and *Groovy*. We also managed to deprecate and replace many of them with JS Microservices frontend by GraphQL.

EDUCATION

Sept 2013-July 2016	BSc	Computer Science (1 st Class Honours)	University of Hull
August 2013	A-Level	Computing, Physics, Maths	St. Bede's Senior School
August 2011	GCSE	Maths, English, Physics & 5 more...	St. Bede's Senior School

TECHNICAL SKILLS

- JavaScript (Web & Server)
- TypeScript
- GraphQL
- React
- Apollo/Redux
- Microservices
- Amazon Web Services (AWS)
- Docker
- CloudFoundry
- HTML5/CSS3
- Ruby
- Java
- C#
- SQL (Postgres & MySQL)
- git
- Bash

PERSONAL PROJECTS

SWG Map Viewer

June 2020

Star Wars Galaxies (SWG) is an old MMO from the early 2000s. This project was a nostalgia trip to see if I could reimplement the map viewer from within the game as accurately as possible using modern web technologies such as TypeScript and ThreeJS while still maintaining a friendly user experience. Available at <https://swg-map-viewer.geit.uk/>

Heatmaps.tf

August 2014

Website created using *HTML5* technologies including *WebGL*, *ThreeJS*, *Angular* and with a *Node.js* backend API that aggregates gameplay data from various partner servers and displays the data in a unique and useful way to assist level designers make data-driven decisions for changes in their maps.

Spock

September 2013

Emulated client (bot) for the popular group VOIP program: Mumble. Built using *C++*, *Python*, and *JavaScript* as a part time hobby, it is perhaps the most advanced bot made for the Mumble platform with the ability to stream music from arbitrary sources such as SoundCloud, YouTube and Spotify.

DayZ Bliss

August 2012

Open source server for the popular zombie survival game *DayZ* – I was an official maintainer and worked on a full redesign of their *SQL* Schema, resulting in 60% load improvements. I also created development tools for the project in *Perl*.

TF2 Feedback

November 2010

Evolved from a proof of concept built over the course of a weekend. TF2 Feedback is a unique system for Valve Software's *Team Fortress 2* built in *PHP* and *SourcePawn* that collects feedback from players during playtests for upcoming maps. Authors can then view the feedback along with associated metadata. The project has been used in the creation of over 4,000 maps and received numerous accolades: most notably from Valve Software and TF2Maps.net.

TF2 PropHunt

August 2009

Built as a collaboration between myself and Luke Foreman and developed in *SourcePawn* and *PHP*. PropHunt is a custom game mode for *Team Fortress 2* with over 450,000 players.