

## Technical Skills

### WEB

Typescript / React / Sass / Emotion  
/ MUI / Apollo Three.js / React  
Three Fiber / Mapbox / Cesium AWS  
/ GraphQL / git / CI / CD / Docker /  
Nginx / apache

### APPS AND GAMES

AR / VR / Unity c# / Android Java /  
Kotlin / ios

### 3D

Modelling / Rendering / PBR  
Materials / Texturing / UV  
Unwrapping

## About Me

Hi, I'm Ian and i'm a devloper with a passion for visualisation and user experience. I have a strong background in 3D visualisation and have worked on a wide range of projects from educational games to web based terrain analysis platforms.

My 20 year career has seen me work with a variety of platforms and technologies. Working in startups has taught me to be versatile, efficient and adaptable. I am passionate about learning and helping others achieve their goals.

I view myself as a highliy motivated, sociable, fast working and adaptable individual. I have ocassionally taken responsibility as a leader (like the time I captained my own dodgeball team!).

Outside of work I like to keep fit with cycling, walking, spending time with my family, reading, gardening and building Lego!

## Employment History

3DEO

2016 – Present

### Visual Engineer

- Built a 3D terrain visualizer for displaying and analysing Bathymetry (under water) elevation data.
- Used shaders to visualize elevation data in colour, for more useful analysis.
- Created terrain analysis tools such as cross section of elevation and sediment volume calculation.
- Worked with Harwich Port to translate their multi depth scanning technique into colour system for harbour pilots.
- Used elevation data in shader to calculate shadows and lighting in realtime.
- Wrote shader to allow blending between different elevation data over time.
- Worked with team to build 'Active Maps', for displaying geo based data on maps.
- Created Server app for converting raw cctv feed to browser compatible video stream.
- Created an AR mobile app to show air quality at various real world locations.
- Built COP26 journey. A 3D flythrough of the Forth estuary, interspersed with videos and user interactions.
- Worked with AWS EC2, S3 and other backed infrastructure.

- Built a VR driving simulator for highlighting the dangers of Alcohol and driving.
- Various AR based app, including displaying interactive information on a real world brain model.
- Worked on Sixty5 app for helping farmers spray fields using GPS data.
- Worked on Combat Air Patrol 2 flight simulator. Modelling cockpits, Aircraft and various supporting assets.
- Created 'Ocean Depths' app for an exhibition. A first person journey into the depths of the ocean in a submarine.
- Developed my skills in client management and personal organisation.
- Created 'Toon Town 3D' live wallpaper app for android. A little cartoon city as a mobile wallpaper.
- Built detailed model of Queens University building in Belfast.

- Building educational games for schools, military and professional industries.
- Used 3ds Max and Photoshop to create, edit characters, objects and environments for the game engine.
- Worked closely with programmers to develop efficient and flexible character rig, which included facial animation.
- Created, applied and edited looping character animations for all game characters.
- Worked on projects for high profile clients such as Siemens, IBM, Fiat, Unilever and PWC.
- Developed tools to rapidly speed up art asset importing as well as improve quality.
- Organised and managed over 2000 art assets in the Caspian library.
- Worked with development team to bring lightmapped environments to the game engine.
- Built a custom 3ds Max material editor to speed up working with game engine materials.

- Built popular Grand Theft Auto websites, GTA3 Unleashed, Vice city Unleashed and G-Unleashed.
- Achieved ranking in the top 50,000 most active websites according to alexa rankings.
- Achieved No. 1 search ranking for "GTA Vice City hidden packages guide" on google.

## Education

2004

BA Hons in  
Creative  
Visualisation  
University of  
Teesside

## Interests and Achievements

- Created and released Xbox Live Indie Game, Avatar Euro Penalty Shootout with a friend , which achieved number 1 sports game and number 8 overall chart position in the UK
- I regularly attend events and networking meetings related to gaming, IT and the creative sector.
- Always keen to learn and keep my knowledge and keep up

1999

A Levels in Maths,  
Physics and  
Technology, St  
John Fisher Sixth  
Form

to date by attending industry related conferences such as  
[unity.com/events/unite](http://unity.com/events/unite) and [www.middlesbroughfe.co.uk](http://www.middlesbroughfe.co.uk)

- Co Developed a Kinect training simulation for NATO and demonstrated it in Rome at the annual ITEC conference [www.itec.co.uk](http://www.itec.co.uk)
- Achieved a top 60,000 website ranking on alexa with [www.g-unleashed.com](http://www.g-unleashed.com)
- I love to keep fit by cycling and walking
- Avid Follower of TEDTalks andt Tech blogs such as [Geek.com](http://Geek.com), and [TheVerge.com](http://TheVerge.com)
- Love Motorsport and Formula 1

1997

GCSE's including  
Science,  
Technology and  
Art, St John Fisher  
High School