

Overview

I'm a graduate from the University of Sheffield with a BSc Honours in Artificial Intelligence and Computer Science, and a year of professional industry experience in Software Development/Research Assistant and Full Stack Web Development roles. I pride myself on building strong interpersonal relationships with clients and colleagues alike.

Technical skills include: AI & Machine Learning, Full Stack Web Development (including front-end JavaScript libraries and UI/UX Design), Web and Mobile Augmented Reality, Unity (C#/JavaScript), IBM Watson Cloud AI Services, JavaScript (Node.js & browser, inc. WebRTC), React, TensorFlow and Agile Methodologies.

I am particularly passionate about creative, ethical and societally useful applications of technology.

Employment/Work Experience

- **February 2020 - August 2020: Creative Partner/Research Assistant/Software Developer/Voice Actor for Robot Performers Project - culminating in 40m film for Festival of the Mind**

Continuation of project began in June 2019 (see below). Was now the sole developer on this project, continuing development of end user visual programming tools (with Node.js and JavaScript), but now also working more on creative elements of the project. This included designing and developing an IBM Watson AI Chatbot, collaborating on script writing, visual design, and even acting in a performance as a voice actor.

Due to the ongoing pandemic I took on multiple extra responsibilities to ensure that the project was successfully completed, including production responsibilities such as building a film set at home, filming video to a professional level and also doing some video editing.

- **Sept 2019 - February 2020: Web Developer at the University of Sheffield for The Institute of Coding**

I was the sole developer of a website for the Institute of Coding built with the Drupal 8 Content Management System, intended to be a network for facilitating the creation of Student Enterprises by providing resources and connecting Industry/University bodies.

I communicated with stakeholders to gather and define site specifications and created and iterated on wireframes with consideration of modern UI/UX principles and patterns, supported by User journey models and diagrams. I created interactive prototypes for final design feedback, then developed and deployed the site to a live server, creating an elegant and unobtrusive front-end using twig (PHP & HTML templating) CSS and JS, while matching the Institute of Coding brand identity. I also extended the Drupal 8 framework developing a custom module using PHP 7 to meet site requirements.

- **June 2019 – July 2019: Creative Partner/Research Assistant/Software Developer for Robot Performers Project**

Collaborated on a project as part of a two person developer team exploring the use of AI and robotics in theatre experiences, with a particular focus on emergent behaviour and exploring the line between creator/AI in performance.

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Responsibilities included day to day development of tools for non-programmers to use to program interactions (built with Javascript, Node.JS, REST API's and IBM Watson AI services), focusing on end user accessibility. Throughout this project I gained experience of a codesign paradigm, working face to face with external and cross-departmental partners to create a flexible and robust system able to be used by the entire team, many of which have no programming experience. I also gained skills in managing client expectations and prioritising requirements to deliver a solution in the required short timeframe. I put learned knowledge of correct software development workflows into practice, using Git version control to collaborate efficiently, iterating through the cycle of identifying requirements, designing features, implementation and testing.

- **September 2018 - July 2019: Volunteer Assistant at After-school Group "Coding Club"**

I volunteered helping teach children of ages around 8-14 CSS, HTML and JS, on occasion leading sessions on programming concepts and other coding activities (e.g. visual livecoding app Hydra) to inspire and foster creative uses of technology. I found it inspiring to see young children of various ages and backgrounds show a passion and aptitude for programming/problem solving that I wish I had at their age.

Education

2016 - 2019: Bsc AI & Computer Science – Class 2.1

Dissertation: Extending a Visual-Toolset for the Creation of AI-Enhanced AR Games by Non-Programmers

- Consisted of extending an event-based online visual programming toolset to add AR tools, IBM Watson Services and Adventure Game systems, which in combination can be used by people without any programming experience to create and distribute AR Adventure Games.
- My Dissertation focused on making new developing technologies (AI and AR) available to people of all abilities and experiences, through the lens of Adventure Games.

Modules of Note:

- Philosophy (Ethics - Theoretical and Practical; Theory of Race, Sex and Gender; Mind, Brain and Personal Identity)
- 3D Computer Graphics
- Adaptive Intelligence

A-Levels – Maths (B), Physics (B), Computing (B)

AS-Levels – English Language & Literature (B), Further Maths (D)

Interests

Currently working on a website for an underground UK Music blog. Mainly interested in creative hobbies, such as; Painting, Game Jams, Music Production and 3D Modelling.

Referees

Details of Referees Available on Request