

# CIAN MORIARTY

## COMPUTER SCIENCE STUDENT

I'm a bilingual student that is passionate about Game Development and Software Engineering, currently applying for positions in either field. Looking for the best opportunity to improve my skills and expand my knowledge.

## PROJECTS

Artificial Intelligence Dissertation Project (ongoing)	<p>The primary aim of this project is to accurately simulate the behaviour of two swarms in a 3D environment as demonstrated in nature.</p> <p>So far:</p> <ul style="list-style-type: none"><li>Discussed and experimented with different AI approaches to modelling the behaviour of autonomous agents in a swarm based on scholarly articles and research of experts in the field.</li><li>Implemented one swarm interacting with obstacles in a 3D Unity environment and attached a 3rd person camera.</li></ul>
<a href="#">Video Demo</a>	
Ruby on Rails	<p>Fullstack Development on a Ruby on Rails web application. Working on this project gave me a rich insight into a real client-developer relationship, which included the following:</p> <ul style="list-style-type: none"><li>Worked with a client as part of an Agile team of 5 to produce a web application for registering NEF attendants.</li><li>Generated custom QR codes and implemented a JavaScript QR code reader that updated an SQL database.</li><li>Worked to a signed requirements document and delivered a complete application to a deadline while maintaining regular communication with the client.</li><li>Tested form inputs (login, registration etc.) and CRUD using RSpec and Capybara.</li></ul>
<a href="#">Github</a>	
*Original repository must remain Private*	
OpenGL	<p>Programmed an animated snowman within a 3D environment using JOGL.</p> <ul style="list-style-type: none"><li>Rendered textures, specular maps, shaders, and lighting.</li><li>Added multiple animations to manipulate the snowman and background.</li><li>Implemented a User Interface using Swing.</li></ul>
<a href="#">Github</a> <a href="#">Video Demo</a>	
Unity2D Game (C#)	<p>Programmed a game in which you control a spaceship and have to fire back the corresponding bullets based on what's approaching.</p> <ul style="list-style-type: none"><li>Handled bullet physics.</li><li>Animated game objects.</li><li>Created a User Interface for Start and Pause Menus.</li></ul>
<a href="#">Github</a> <a href="#">Video Demo</a>	

## EDUCATION

University	University of Sheffield - BSc Computer Science
	Completed modules including: Automata and Complexity, Logical Reasoning, Algorithms, Data Driven Computing, and Robotics.
Secondary School	Ysgol Gyfun Gymraeg Glantaf
	A levels - Maths (A), Further Maths (B), Physics (B), Welsh Baccalaureate (Pass)

## CONTACT

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GitHub:  
<https://github.com/CianMoriarty99>

Portfolio:  
<https://cianmoriarty99.github.io>

## SKILLS

C#	PureData
Java	SQL
Haskell	Agile
Python	Methodologies
JavaScript	Unit Tests
C++	Version Control
OpenGL	Linux
Ruby on Rails	Animation
	CSS/SASS

## AWARDS

### [CREST Gold Award](#)

On a small team across 7 months we were tasked with designing an innovative solution for sustainable and eco friendly suburb streets.

- Worked closely alongside AECOM during the project, discussing the feasibility of our potential solutions.
- Pitched our final solution to judges (experts in related fields) against participants from schools across Wales.
- Finalists for 7 awards on presentation day, and received a CREST Gold Award for our efforts.

### [Engineering You're Hired - "Best Pitch for Funding"](#)

Worked on a week long project in a group of 5 to design a solution that improves the safety of rural roads. Received the award for "Best Pitch For Funding" against 7 other groups

## HOBBIES

Hackathons - HackSheffield 3,4, and 5, HackNotts2019

Health and Fitness

Participating in and organising NSE Esports University Tournaments

References available upon request