

# Justin Tawan Ward

## Graduate Games Programmer

I'm a recent graduate in Games Design and Development at the University of Greenwich, specialising in programming and graduating with First Class Honours. As a hard working team player, I'm always giving my all and looking for the best outcome to any situation. Skilled in C# and Unity, with good knowledge of JavaScript and Git. I'm also developing my skills in Unreal Engine 5 Blueprints and C++.

## Projects

### September 2024 - April 2025 | Final Year Individual Project

#### Echoes Act | Unity, C#, Git, ShaderGraph | Grade: 89

- Performing research into Non-Human First Person Perspectives in games
- Specifically looking into echolocation and the effect that a new sense has on immersion
- Play as a dolphin who uses echolocation to traverse the dark environment and clean up ocean rubbish

#### Game Developer

- I used Unity's ShaderGraph to create intersection shaders for the echolocation pulses and HLSL to outline objects which the player can interact with
- Uses 3D audio and haptic feedback to increase immersion in low-visibility situations
- Performed quantitative and qualitative data gathering to determine the level of immersion which the echolocation mechanics provide for the player

### February 2025 - April 2025 | Industry Brief - XR Project

#### Blackbeard's Cannon Clash | Unity, C#, VR | Grade: 85

- A standalone VR experience for installation in the National Maritime Museum's Pirate Exhibition, following a brief they delivered and meetings with staff at the museum
- Set sail on Blackbeard's ship and hear about his stories from the NPC version of Blackbeard
- Look out for enemy ships with his spyglass and fire his cannons to defeat them

#### Mechanics Programmer and VR Optimisation

- I set up the VR interactions aboard the ship and created the spyglass and cannon game mechanics
- I used optimisation techniques to allow the game to run at a smooth framerate as a standalone Android build for Quest devices.

### September 2024 - December 2024 | Final Year Group Project

#### Gone Fishin' | Unity, C#, VR | Grade: 73

- Relaxing Virtual Reality fishing game with graphics inspired by SEGA Bass Fishing
- Catch 6 types of fish, with normally distributed weights, which affect catch difficulty
- Following an Agile approach to project management

#### Lead Programmer

- I programmed the fishing rod's mechanics, using physics-based casting and reeling for realism
- I set up the VR interactions with the fish, rod, and other objects in the scenes using Unity's XR Interaction Toolkit

### Septemter 2023 - April 2024 | Solo Project

#### Temporus | Unreal Engine 5, Blueprints, C++ | Grade: 87

- A 3D Hack'n'Slash platformer
- Advanced character controller - slide, dash, wall run, edge mantle
- Time slowing mechanics

#### Game Developer

- I developed the game using Unreal Engine' blueprint system, creating the player and gameplay loop
- Created enemy AI using UE5's blackboard and behaviour trees
- Created interactable pick up items using custom C++ classes

### November 2023 - January 2024 | Group Project

#### So You're Tellin' Me? | Unity, C#, Arduino, C++, Git | Grade: 88

- 3D cooking game with unique installation
- A custom controller shaped like a pan uses an Arduino to send data to Unity
- Uses Arduino input components like a gyroscope, potentiometer, joystick, and outputs like LEDs, motor.

#### Lead Programmer

- I programmed the game in Unity and coded the ability for information to be passed between the Arduino and Unity
- I created the main mechanics and gameplay loop, including the player's input affecting the wok in game and the progression system, as well as outputs to the Arduino components
- Showed my teamworking and communication skills while the 3 of us worked remotely over the holidays

## Contact

### Email

[justinward.dev@gmail.com](mailto:justinward.dev@gmail.com)

### LinkedIn

[linkedin.com/in/justintward/](https://www.linkedin.com/in/justintward/)

### Portfolio Website

[justinward.uk](https://justinward.uk)

## Education

### University of Greenwich

BSc (Hons) Games Design and Development  
**First Class Honours**

### John Taylor High School

A Level:

- Computer Science - A
- Maths - A
- Physics - B

## Skills

- C#
- Unity
- C++
- Unreal Engine 5
- JavaScript
- Version Control
- OOP
- Game Development

# Work Experience

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## ○ Unity Tutor - 1 Year

### Spark4Kids

Remote

- I tutor Unity and C# to DofE aged children (aged 13-17) following Spark4Kid's Unity course
- Acting as a supervisor during the sessions, offering help to any student who has questions about Unity or C# code

## ○ Cafe Assistant - 7 Months

### The Galley Cafe

Greenwich, London

- Serving food, working on the tills, cleaning tables and surfaces, and working as a barista
- Handling stressful situations with lunchtime rushes and ensuring swift service for customers

## ○ Kitchen Porter - 14 Months

### The Meynell Ingram Arms

Hoar Cross, Staffordshire

- Ensuring cleanliness throughout the kitchen throughout the shift in the kitchen and in customer's dishes and cutlery.
- Assisting chefs and other staff with their duties, occasionally making pizzas

## ○ Race Marshal - 18 Months

### Midland Karting

Fradley, Staffordshire

- Teaching safety measures to customers and how to safely operate the karts
- Marshalling the track to look out for dangers or help customers
- Working resiliently in many different weather conditions and across long shifts

# Achievements

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## TIGA UK Games Education Awards 2024 and 2025

**2024** - My group project "So You're Tellin' Me...?" was nominated for the Best Student Game 2024. We were shortlisted for the finals against 12 other projects from university games courses around the UK. This was a great milestone as a second year student at the time, and the team are all so proud of reaching the finals!

**2025** - I have been nominated as the University of Greenwich's Outstanding TIGA Graduate of the Year: Programmer! My grades and projects throughout my undergraduate degree, as well as my showreel, have earned me this nomination. My final year group project "Gone Fishin'" has also been nominated for the Best Student Game 2025. I can't wait to find out more information about the 2025 awards soon!

## Digital Shark Expo - 2023, 2024, 2025

I was nominated to present Dauntless Depths at the university's End of Year Show 2023 in my first year and my second year games So You're Tellin' Me...? and Temporus at the End of Year Show 2024. At the Digital Shark Expo 2025, I presented 5 of my final year projects: Echoes Act, Gone Fishin', my Shader Programming portfolio, Blackbeard's Cannon Clash, and Murhpy's Gift Delivery Service, showing my skills of confidence and communication when speaking to industry professionals about my games, and potential new students about the course.

## UOG Games Dev Society

I was a founding member of the new Games Dev Society at the University of Greenwich during my second year at uni. My main role was Instagram Manager, but I also showed my leadership and management through my involvement in the planning and running of events, as well as advertising and getting new people interested. We won the Best New Academic Society Award at the Student Led Teaching Awards 2024!

## DofE Gold Award

I received my Duke of Edinburgh Gold Award in Buckingham Palace Gardens and spoke with the Duke of Edinburgh, Prince Edward. I completed a week residential at Scorpion Airsoft where I learnt good teamwork skills with a new group of people. I also completed a 6-day expedition in Mid Wales, walking over 100km and climbing to the peak of Pumlumon Fawr - with a 752m elevation. I used my skills to communicate with my group, boost morale and keep everyone motivated, ending with my group being the first group to finish.

# Hobbies and Interests

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- Game development and playing games!
- Playing badminton in the UOG Badminton Club
- Snowboarding with the UOG Snowsports Society
- Going to rock and indie gigs with friends
- Reading manga and watching anime
- Drawing anime characters and drawing my girlfriend and I into manga panels
- Travelling and playing Pokemon Go