

## Contact

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## Top Skills

Unity

Virtual Reality Development

C#

## Certifications

Unity Essentials Pathway

Unity Junior Programmer

# Tarn Cooper

Unity VR C# Game Developer

Canberra, Australian Capital Territory, Australia

## Summary

With a background encompassing three years of dedicated study in game development at AIE and subsequent hands-on experience in the indie industry, I bring a wealth of expertise as a C# programmer. As an adept Unity developer, I possess a versatile skill set honed in C# programming within the Unity Engine environment. My specialization lies in VR development, with a focus on mobile headsets like Meta Quest and Picos. My work revolves extensively around integrating VR systems seamlessly into the game world, involving aspects such as physics, UI design, and multiplayer functionality.

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## Experience

### Evolve Simulations

Unity Developer

June 2023 - June 2024 (1 year 1 month)

Canberra, Australian Capital Territory, Australia

At Evolve Simulations, I led the creation of user interfaces for WebGL and VR applications. I integrated character animations using Character Creator 4, including body and facial animations with audio lip sync from our AI server. I optimized asset management with the Unity Addressables system for efficient WebGL downloads, keeping the application size small. Additionally, I developed a user-friendly UI system using Meta's XR framework for intuitive hand-tracking interactions in VR.

### RecoveryVR

Unity Developer

March 2023 - June 2024 (1 year 4 months)

Canberra, Australian Capital Territory, Australia

At RecoveryVR, I led the development of VR sports games, including basketball, tennis, and cricket. I improved the Pico 4 motion recording system for better physio data capture and transmission to Firebase. Using Photon Fusion, I created the framework for an engaging multiplayer VR experience

in RecoveryVR's Metaverse application. I also integrated third-party software like Ready Player Me, Inworld, Blockade, and OpenAI to enhance the user experience.

## Liminal VR

### Unity Developer

November 2022 - March 2023 (5 months)

At LiminalVR, I conducted extensive testing of the Liminal platform, focusing on purchasing processes and sub-application performance before its public release. I optimized student-made games for better performance and visual quality. Additionally, I developed a training application for electricians using the Dialogue System for Unity to create engaging educational modules.

## Academy of Interactive Entertainment

3 months

### Teacher

September 2022 - November 2022 (3 months)

Australian Capital Territory, Australia

I worked as a teacher at AIE, delivering basic IT courses with a focus on the games industry. My responsibilities included designing curriculum, instructing students on foundational IT concepts, and guiding them on how these concepts apply within game development.

## Virtual Production Technician

September 2022 - November 2022 (3 months)

Canberra, Australian Capital Territory, Australia

I worked as a Virtual Production Technician at AIE, where I was responsible for setting up the LED dome display and helping to display environments using Unreal Engine. My role involved ensuring the smooth operation of the LED display system and integrating Unreal Engine environments for immersive experiences.

## Virtulane

### Unity Developer

August 2022 - November 2022 (4 months)

Canberra, Australian Capital Territory, Australia

At Virtulane, I prototyped a VR UI system that allows users to visualize satellites orbiting the Earth through an interactive 3D globe interface, accessing satellite information with finger presses. I also designed and developed a Die-Hard-inspired escape room for a cybersecurity event,

featuring climbing and crawling mechanics, and basic stealth detection AI for an engaging VR experience.

### Smashbyte Games

#### Unity Developer

July 2021 - November 2022 (1 year 5 months)

Australian Capital Territory, Australia

At Smashbyte Games, I prototyped innovative uses of the Nintendo Switch platform, using its 3DoF controller system to emulate a VR-like 6DoF experience. I also developed a recording tool that saves controller data to a text file, making it easy to import into the Unity engine.

### FeelDX

#### Software Developer Internship

June 2022 - June 2022 (1 month)

Canberra, Australian Capital Territory, Australia

I worked with Unreal Engine to develop tools for showcasing building construction.

### Smashbyte Games

#### Unity Developer Intern

May 2020 - December 2020 (8 months)

Canberra, Australian Capital Territory, Australia

At Smashbyte Games, I prototyped innovative uses of the Nintendo Switch platform.

### RecoveryVR

#### Software Developer Intern

March 2020 - May 2020 (3 months)

Canberra, Australian Capital Territory, Australia

At RecoveryVR, I helped to develop simple VR games.

### SilverSun Pictures

#### Virtual Production Technician Intern

October 2019 - December 2019 (3 months)

Canberra, Australian Capital Territory, Australia

At Silversun, I helped research early Virtual Production using Unreal Engine

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## Education

### AIE Institute

Bachelor of Games and Virtual Worlds, Professional Game Development -  
Game Programming · (January 2019 - December 2021)

### Canberra Institute of Technology

Diploma in Software Development, Software Development · (June  
2018 - December 2018)

### Canberra Institute of Technology

Certificate 4 in Programming, Programming · (July 2017 - June 2018)

### Canberra Institute of Technology

Certificate 3 in Information, Digital media, Technology, Information, Digital  
media, Technology · (January 2017 - July 2017)