

Ambrose Wee

Software Engineer
C++ / C# Programmer

CONTACT

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PROFILE

A resourceful, versatile, and passionate graduate skilled in both programming and game design who is looking to create engaging gaming experiences through clean coding practices and innovative ideation.

EDUCATION

Digipen – BS in Computer Science and Game Design (Ongoing)

- Expected Graduation in mid (2023)

Temasek Polytechnic – Diploma in Game Design and Development (2017)

- Received Diploma with Merit

SKILLS

C++	Game Design and Ideation
C#	Unreal Engine and Unity Engine Knowledge
UDP / TDP Networking	Feature Testing and Validation
Git with Source Tree	Project Management
Data Structures and Algorithms	Code Documentation

FEATURED PROJECTS

“Mouse Trap!” Third Year Game Project

- Gameplay Programmer using a custom ECS engine in a team of 10 members.
- Created C++ libraries for Input Systems, NavMesh Pathfinding, and Behaviour Tree AI.
- Implemented Boss AI that uses Behaviour Tree and NavMesh to pursue and attack player.
- Communicated with Designers regularly to bridge the gap between tech and creatives.
- Provided QA Testing and code review for fellow programmers.

“Out of Order!” Second Year Game Project

- Gameplay Programmer and Designer using custom engine in a team of 7 members.
- Developed an AI that replays player actions from previous lives in a changing environment.
- Developed event messaging system to communicate between scripts.
- Designed gameplay mechanics that blends time-looping and environmental destruction.
- Presented game design and relayed information as technical features required to support the game to team members.

Narrative Game Project

- Created a linear narrative game about choices in Unity Engine.
- Programmed the backend systems to support other programmers and implement game features.
- Created a dialogue system that deserializes files to retrieve character dialogue and symbols to trigger in game events.

Unreal Engine Technology Exploration Project

- Created a short cinematic sequence in Unreal Engine.
- Imported 3D models and animated them with Rokoko motion tracking suits.
- Used tools such as Unreal's Landscape Tool and Quixel Bridge to create a believable night desert environment.

OTHER PROJECTS

Networking Game Project using Winsock2 C++

- Took an existing game project to incorporate multiplayer functionality with lag compensation.

Level Design Project

- Used Unreal Engine to practice concepts of level design such as metrics, spatial design, player guidance to create an immersive experience for the player in a 3D environment.

Various Design module projects

- Various other game design-oriented projects such as prototyping board games, designing RPG systems and mechanics to develop good design skills for an enjoyable player experience.

PROFESSIONAL EXPERIENCE

Sky Optimum Technologies (Defunct) – Interned as 3D environment Artist (2016)

- Modelled and textured 3D assets such as furniture and structures for use in Unity Engine.
- Learnt 3DS Max workflow to render products in a showroom scene for website storefront.
- Performed user testing and feedback for mobile apps built in Unity Engine.