Aaron Ebrey

Computer Games Development Student
Gameplay Programming Focus

Portfolio: https://clawedatom.github.io/AEPortfolio/
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Personal Profile

Computer Games Development student at Manchester Metropolitan University with 5+ years of experience building gameplay systems in Unity and Unreal Engine.

Focused on gameplay systems including player controllers, state machine-based systems and procedural elements, primarily developed as a solo developer..

Actively seeking an internship in the games development industry to apply technical skills within a professional studio environment.

Technical Proficiencies

- Engines: Unity & Unreal Engine
- Languages: C#, C++
- Tools: GitHub, Trello, Visual Studio

Key Projects

Unreal Engine Combo Combat System

Solo Prototype (UE5, C++)

Developed a gameplay prototype focused on a responsive, state-driven combat system.

Key Systems

- Designed a modular state-driven player controller for responsive and extensible gameplay logic.
- Implemented a combo-based melee combat system using animation montages.
- Built test actors to validate hit detection and feedback.

Reflection

Developed a strong understanding of Unreal Engine architecture, including actor/component structure and state-driven gameplay design. Additionally, gained experience implementing modular gameplay systems.

GitHub Source: https://github.com/Clawedatom/Combo-System-UE5-Project

Alien Survivor

Team Project (Unity, C#) – Lead Programmer

2D wave-based shooter developed in a 7-person team over 2 months.

Lead Programmer Responsibilities

- Supported team members with technical challenges and debugging.
- Acted as a bridge between design and programming teams.
- Integrated multiple gameplay systems into working prototypes.
- Contributed to Trello and GitHub discussions and management.

Key Contributions

- Procedural map generation using grid systems and Perlin noise.
- Turret system with enemy targeting logic.
- Grid-based building system.
- Rapid prototyping and system integration at the end of development sprints.

Reflection

Gained experience working in a collaborative development environment, including systems integration, cross-discipline communication and supporting other programmers. Developed an understanding of responsibilities involved in a lead programming role.

GitHub Source: https://github.com/Clawedatom/Wave-Shooter-Team-Project

Greedy Little Goblin

Co-Hosted Game Jam

Solo prototype (Unity, C#)

Developed and released a complete game during a student game jam while co-hosting the event.

Key systems

- Designed and implemented a state-driven character controller, including dynamic shrinking mechanics
- Developed gameplay systems that adjust collision, interaction and detection based on player size
- Implemented level structure and progression systems within strict time constraints
- Scoped and prioritised features to ensure a complete build by the deadline.
- Contributed to jam organisation, including setup and participant engagement

Playable Build: https://zelldauron.itch.io/greedy-little-goblins · **GitHub Source:** https://github.com/Clawedatom/GreedyLittleGoblin

Reflection

Improved ability to scope and prioritise features under tight deadlines. Learned the importance of managing scope effectively and delivering a polished and complete experience within time constraints.

Education

Manchester Metropolitan University *(Current)*

BSc (Hons) Computer Games Development

A-Levels - King Edwards VI College Stourbridge *(2020-2022)*

Awards: Computer Science (C), **Chemistry** (C), **Physics** (B), **Core Maths** (C)

GCSE - Perryfields High School *(2015-2020)*

Awards: 8 Total GCSEs

Employment Experience

Warehouse Operative – Gadjet, Oldbury *(Oct 2022 – Feb 2023)*

- Worked effectively within a fast-paced team environment
- Demonstrated reliability, time management and adaptability under pressure

Interests

Game Development – Regularly design and develop games with a focus on gameplay mechanics, systems design and technical problem solving.

Music – Interest in live music and creative inspiration for game ideas.

References

Available on request.