

MICHAEL HAMMOND



GAMEPLAY PROGRAMMER

PROJECTS

More projects and details available in my portfolio: <https://gamnrd.github.io/>

The Final WaveZ - Top Down Mobile Zombie Shooter

Mar 2022 - PRESENT

Unity | C# | Mobile | Solo

The Final WaveZ is a top down zombie shooter built for mobile and PC. The player must face off against growing waves of zombies to survive as long as possible while collecting resources for their camp to purchase upgrades and grow stronger.

Game Programming

- Rapidly prototyped and iterated on gameplay systems to enhance overall gameplay experience.
- Built reusable systems (event system, AI state machine, save system) to accelerate future feature development
- Created a custom system for enemy spawners to improve gameplay mechanics and increase the challenge for players.
- Designed and implemented a custom save system to record player progress, resources, and upgrades.
- Focused on creating simple, repeatable gameplay loops with increasing challenge
- Strong focus on optimization to ensure the game runs smoothly on mobile devices new and old.

VR Hospital Evacuation Simulation

Feb 2023 - Apr 2023

Unity | C# | VR | Team

As part of the Augmented/Virtual Reality course at Conestoga College, I participated in the creation of a VR hospital evacuation simulation. The client, Cambridge Memorial Hospital, commissioned us to develop a proof-of-concept VR simulation for fire evacuation scenarios.

VR Developer

- Developed the tasks for the training simulation, including designing and implementing various scenarios and challenges to enhance user learning and engagement.
- Developed a customized task tracker to efficiently record and monitor the progress of all tasks.
- Setup the interactions between the user and the world by defining and implementing user controls, object interactions, and environment dynamics.
- Created tutorial scene to provide users with a guided introduction to the simulation, ensuring a smooth onboarding experience and facilitating their understanding of key concepts.

EDUCATION

Software Engineering Technology | Specialization in Game Development Jan 2020 - Apr 2023

Conestoga College | Waterloo, ON | 3.66 GPA

Completed the Advanced Diploma in Software Engineering Technology from Conestoga College with a focus on Game Development in the final year. Key coursework included Game Design, Game Development, and AR/VR Development.

- Developed Windows, Web, Android, and VR games using various programming languages and frameworks.
- Proficient in a wide range of programming languages including C, C++, C#, HTML, CSS, JS, Java, and Python.
- Proficient in utilizing Unity, Unreal Engine, Visual Studio / VS Code, GIT, Blender, and Android Studio
- Strong emphasis on Object-oriented Programming, data structures, and algorithms
- Applied industry best practices to ensure the development of robust computing systems.
- Skilled in project management principles and tools for efficient requirements implementation
- Demonstrated expertise in computer architecture and machine language.
- Possess a strong background in mathematics and statistics, which contributes to effective software development.
- Experience with Computer Architecture, Boolean devices, truth tables, and logic operations
- Successfully implemented Agile and Scrum methodologies in collaborative team projects.

SUMMARY

Enthusiastic and skilled Gameplay Programmer, graduate looking to leverage my college education and lifelong self-taught expertise to contribute to a career in Game Development. Dedicated and detail-oriented individual with over 16 years of experience in programming and developing games.

SOFT SKILLS

• Attention to Detail • Problem Solving • Creativity • Eager to Learn • Adaptable • Teamwork • Communication • Time Management • Leadership •

TECHNICAL SKILLS

UNITY: Experience with, OpenXR, XR Interaction Toolkit, Animation, Netcode, Post Processing, Particles, AI Navigation, 2D/3D/VR Games, Developed for PC, Mobile, VR and WebGL.

SOFTWARE: Unity 3D, Unreal Engine, Visual Studio, Android Studio, PyCharm, Blender, Photoshop, Audacity

CODING: Object-oriented programming, Data structures, Algorithms, Code Optimization, Debugging.

PROGRAMMING LANGUAGES:

C/C++, C#, Python, Java, JavaScript, HTML, CSS, TypeScript, PHP, Ruby, Node.js, SQL, Assembly, MATLAB

AI Tools: Experience using AI tools like Bezi, Co-Pilot and to speed up development and debugging process.

CERTIFICATIONS

Electronic Arts | Software Engineering Virtual Experience Program

Forage | Jul 2023

WORK EXPERIENCE

Senior Document Specialist

Mar 2024 - Present

Sunlife | Waterloo, ON

- Accountable for accuracy and quality throughout production process, ensuring clients receive proper documents
- Ability to move between tasks on a daily basis to maintain service levels and meet customer and business needs
- Implemented new procedures and policies to improve efficiency
- Obtained a Government of Canada Reliability Status security clearance

Front-End Department Manager

Mar 2018 - Nov 2022

Loblaws | Waterloo, ON

Managed a department of 50+ employees including cashiers, service clerks, self scan, customer service, and PC express. Created schedules, ordered products and supplies, regular communication with upper management and the other departments, event planning.

- **Leadership** - Prioritized and maintained high morale and performance of team members. Provided staff with opportunities for professional growth into new roles in the department. Ensured team members felt valued, productive, and consistently motivated.
- **Communication** - Implemented new systems to keep all staff updated on changes and upcoming events/promotions. Regularly checked in with staff to gather feedback on what was working, what was not, and identify areas for improvement.

Front-End Supervisor

Apr 2013 - Mar 2018

Loblaws | Waterloo, ON

Supervised cashiers, balanced cash registers, oversaw store closing, trained new cashiers, service clerks and supervisors, performed overrides.

- **Time Management** - Created a daily routine to get all tasks done in a timely manner that was adapted by all other supervisors by splitting the job of balancing tills at the end of the day into smaller waves of balancing throughout the day, allowing more time to work on other tasks. Created a web app to assist with counting lotto inventory, cutting the time required in half.
- **Problem Solving** - Successfully resolved customer concerns by providing effective solutions. Fixed technical problems on the various hardware used in the department. During several power outages, managed to get all customers checked out in a timely manner, organize staff to help in other departments, and balanced all registers before the backup power failed.

Cashier

Nov 2008 - Apr 2013

Loblaws | Waterloo, ON

- **Eager to Learn** - Actively sought opportunities to expand knowledge and skills by taking on various roles within the store during idle periods. Quickly learned other roles within the front-end department such as self scan, customer service clerk, and pc express order picker. Expanded my knowledge and skills by learning roles in the bakery, photolab, grocery, and night crew.

ONLINE COURSES

ZENVA CURRICULUMS:

- Unity Game Development Mini-Degree
- Unity Associate Game Developer Certification Pathway
- Virtual Reality Mini-Degree
- Unreal Game Development Mini-Degree
- Python Mini-Degree
- C++ Programming Academy