

Professional Summary

Game Developer with experience in Game Engines, object-oriented programming, optimization and debugging. Ability to learn quickly by using new tools, applications and programming languages. Accomplished in elevating games with new and improved strategies.

Work Experience

Quality Assurance Tester Contractor

June 2023 – Present

Altagram Group – Montreal, Quebec

- Tested games identified and debugged problems and bugs.
- Collaborated with localization teams to ensure accurate translations and cultural adaptations of in-game content for global releases.
- Identified, documented, and tracked software bugs and issues using bug tracking systems, such as JIRA, providing detailed reports to development teams.

Unity Game Developer Contractor

November 2022 – Present

Visualhawk Solution Inc – Toronto, Ontario

- Developed game systems, individual gameplay features, and player progressions.
- Implemented features and game systems including Character, Camera and Controls.
- Debugging, profiling, and performance optimization to be compatible with various platforms such as mobiles and VR.
- Collaborated with team to complete UI elements based on the plan and schedule.
- Worked on serialization and retrieving game data using Wireshark.
- Worked as a key part of an agile development team, taking responsibility for organizing and planning own work.

Skills

- Game engines Experience (**Unity, Unreal 5**)
- High Proficiency in programming languages (**C# and C++**)
- Experience With Web Programming (**HTML, CSS, JavaScript, REST APIs**)
- Experience with source control and project management tools (**Git, Github and Jira**)
- Experience with **Artificial Intelligence**: State, A*, GOAP, Behavior Tree, Flocking, BFS, DFS, Splines
- **UI/UX** design Experience in game engines
- Experience deploying apps on (**WebGL and Spark Studio**)
- Experience with **Design Patterns**: Factory Pattern, Object Pools, Singletons, Strategy Pattern and Command Pattern
- Experience with **Architectures**: Top-Down, Component, Event and Coroutine based
- Experience with **SOLID** principles and **unit testing**
- **Troubleshooting** and problem-solving
- Strong **team, communicative, interpersonal** skills and **self-motivated**

Education

Attestation of College Studies: Video Games Programming January 2021 – January 2023

Higher Institute of Computer Science, ISI – Montreal, Quebec

Coursework: Game Engines, Object-Oriented Programming, Games Mathematics, Graphics Libraries, 2D/3D Tools, UI Programming, Web Programming, Artificial Intelligence

Bachelor of Engineering: Electronic and electrical engineering September 2013 – May 2019

Higher Technological Institute, HTI – Egypt

Coursework: Algorithms and Data Structure, Object-Oriented Programming, Operating Systems

Certificates

Meta AR Developer Professional Certificate April 2023 – present

Coursework: Spark studio, Play Canvas WebGL, Unity, AR effects, AR games.

Projects

Siege Master (Unity3D, C#, VR, Third person shooter, Tower defense) ([Github](#)) ([Video](#))

3D game built with a team of 3 that we made in 2 weeks using Unity, C#, inbuilt and custom-made Unity tools. Featuring Dynamic UI, 3 types of enemies including ranged and melee, 1 Boss with unique abilities, Quest Manager with both main and side quests, Melee, ranged and blocking combat with player stamina system.

Get it & get out (Unity3D, C#, VR, Grappling hook) ([Github](#)) ([Video](#))

3D Platformer game built with a team of 5 that we made in a week, it made in Unity with features like Melee Combat, Grapple Hook, Time slow, and 1 fully playable level.

Physics Mario (Unity2D, C#) ([Github](#)) ([Video](#))

My first game using unity engine, the game is the simple Mario 2D game, I created my own tools to control physics of the game, Parallax effects for camera and multiple rounds.

AI restaurant Manager (Unity 3D, C#) ([Github](#)) ([Video](#))

An AI tool could be used for other games, I used to create three robots' behavior trees, command communicating and agent navmesh.

Tools (Unity Editor, C#, OCP) ([Object Placer tool](#)) ([Mono Cards Creator tool](#))

My first tools for frond end developers for card games were to create cards with different designs and details, also to place objects with different shapes, colors and details in a minute.

Shoot it (Unreal engine 5, Blueprint, First person shooter) ([Video](#))

My first game using Unreal engine which I used the blueprint to create simple first-person shooter game, the player has some targets to shoot, and he must shoot all of them before time runs out.