

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

Altagram Group – Montreal, Quebec

Unity Game Developer Contractor

February 2024 – Present

- Led the rapid prototyping of an innovative game concept, showcasing advanced Unity and C# skills to solve complex design challenges and validate gameplay ideas quickly.
- Optimized codebase for improved performance, focusing on identifying and refactoring specific bottlenecks and enhancing overall efficiency.
- Developed a system for importing and parsing text data in Unity, enabling dynamic content updates. Leveraged "System.IO" and Unity's "TextAsset" resources to facilitate data integration.
- Documented prototyping techniques and optimization strategies, aiding future rapid development efforts.

Quality Assurance Tester Contractor

June 2023 – Present

- Executed game testing, identifying, and resolving bugs to enhance game quality.
- Collaborated with team on game localization, ensuring accurate translations and cultural relevance for global markets.
- Efficiently documented and tracked bugs using tracking systems, optimizing the QA process.

Unity Game Developer Contractor

February 2023 – June 2023

TEKE Inc – Canada

- Spearheaded the development of the TEKE Bluetooth application within the Unity Editor, introducing color change functionality and playlist creation, enhancing user interaction.
- Developed UI features, such as color selection and effect saving, for improved user experience.
- Gained hands-on experience in implementing Bluetooth and Wi-Fi toggling functionalities using Unity networking, showcasing an understanding of behind-the-scenes processes.

Unity Game Developer Contractor

November 2022 – October 2023

Visualhawk Solution Inc – Toronto, Ontario

- Developed game systems, individual gameplay features, and player progressions.
- Implemented features and integral game systems including Character, Camera, and Controls.
- Conducted debugging, profiling, and performance optimization initiatives, ensuring smooth, high-performance gameplay on VR platforms.
- Collaborated closely with the team to design and deploy UI elements on schedule.
- Advanced game data management through serialization techniques with Wireshark.
- Contributed as a key part of an agile development team, planning, and executing tasks to meet project milestones and deliverables.

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.

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**