

**PORTFOLIO** 

**GITHUB** 

LINKEDIN

Canada

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## **Professional Summary**

Game Developer with a background in electronic engineering, I bring extensive experience in object-oriented programming and game engines to the table. Ability to learn quickly by using new tools and programming languages. Accomplished in elevating games with 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.to meet project milestones.

## Site Engineer Riyadh Aletqan Co. – Jeddah, Saudi Arabia

December 2019 – January 2021

- Planning & Control: Quantity Survey, Inspection Request.
- Electrical Submittals and Daily Reports handling.

## Youth Mentor

September 2015 – January 2018

Hayah Academy – Cairo, Egypt

- Character building and strategic planning for middle school students.
- Tours and journeys preparation in Egypt.
- Organized more than 10 recreational, cultural, and educational trips.
- Member of the Primary stage committee, which carries various responsibilities, including:
  - o Tutoring a group of 10 juniors on many different topics.
  - Establishing the club's objectives and setting plans for every year.

#### Education

**Attestation of College Studies**: Video Games Programming **Institut Supérieur D'Informatique ISI** – Montreal, Quebec

January 2021 – January 2023

**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.

#### Skills

- Experience with Game Engines (Unity and Unreal 5)
- High Proficiency in programming languages (C# and C++)
- Experience With Web Programming (HTML, CSS, JavaScript, SQL)
- 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
- Software engineering programs (AutoCAD, ETAP, Dialux)
- **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 working in **Agile** work environments
- Experience working with **UI** in unity and Unreal engine.
- Troubleshooting and problem-solving
- Strong team, communicative, interpersonal skills and self-motivated

## **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.

## Al restaurant Manager (Unity 3D, C#) (Github) (Video)

An Al 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.