HAMZA MOHAMAD

Portfolio **LinkedIn** **Github**

Canada | **(514) 661 1411** | **hamzah.labib@gmail.com**

SUMMARY

Game Developer with experience in Unity 2D, 3D & VR, object-oriented programming, optimization and debugging. Ability to learn quickly by using new tools, applications and programming languages.

EDUCATION

- **Video Game Programming Attestation of College Studies** (**2020 – 2022)**
  - ➢ L'institut Supérieur d'Informatique, Montreal, Canada.
- **Electrical and Electronics Engineering Bachelor degree** (**2013 – 2019)**
  - ➢ Higher Technological Institute, Egypt.

TECHNICAL SKILLS

- **Languages:** C#, C++, Java, SQL, Python, HTML, CSS.
- **Architectures:** Top-Down, Component based, Event based, Coroutine based.
- **Design Patterns:** Factory Pattern, Object Pools, Singletons, Strategy Pattern, Command Pattern.
- **Artificial Intelligence:** Stat, A*, GOAP, Behavior Tree, Flocking, BFS, DFS.
- **Management:** Agile, Agile Scrum, TDD, XP, Jira, Git.
- **Engines:** Unity 2D, 3D, VR and Unity Editor, Unreal Engine 5, OpenGL.
- **Debugging:** Breakpoints, Enforce defensive coding techniques, Unit Test.

PRJOECTS

Siege Master (**Github**) (**Video**)
Unity 3D, C#, PC, VR, Third person shooter, Tower defense
The game was built by using Top-Down based, Singleton, Strategy pattern to manage Factory pattern & object pool, Command pattern, Open Close Principle and States machine concept.

Get it & Get out (**Github**) (**Video**)
Unity 3D, C#, VR, Grappling hook
The game was made with features like destructible buildings, flocking AI and particle system.

Physics Mario (**Github**) (**Video**)
Unity 2D, C#, PC
The game was built by using my own simple math & physics engine, by using stats concept, parallax.

Object Placer & Color Tool (**Object Placer tool**)
Unity Editor, C#, Scriptable objects
Created several tools for other developers.

Mono Cards Creator Tool (**Mono Cards Creator tool**)
Unity Editor, C#, Scriptable objects
Created several tools for other developers.

AI Restaurant Manager (**Github**) (**Video**)
Unity 3D, C#
Created three robots using behavior trees, command communicating and agent navmesh.

Shooting Game (**Shooting Game video**)
Unreal Engine, Blueprint, First person shooter.
The game is about shooting some targets before time runs out.