HAMZA MOHAMAD

Portfolio   **LinkedIn**   **Github**

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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, Manager, Singletons, State Machines, 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.

PRJOECTS

Siege Master   **Github Video**
Unity 3D, C#, PC, VR, Third person shooter, Tower defense

The game was built by using Top-Down based, 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. Also built by using Top-Down based and singleton.

Physics Mario   **Github Video**
Unity 2D, C#, PC

The game was built by using math & physics manually, stats concept, parallax and UI.

Tools   (**Object Placer tool**) (**Mono Cards Creator tool**)
Unity Editor, C#, Scriptable objects

Creating several tools for other developers.

Restaurant Manager   **Github Video**
Unity 3D, C#

Created three robots using behavior trees, command communicating and Agent navmesh.