

MEHDI ALI

Unity Developer | Programmer

Montréal, QC | mehdi-ali.github.io

alimehdi.offi@gmail.com

Unity Developer with a strong foundation in 3D. Passionate about designing engaging gameplay and scalable systems. I am good at problem-solving and always eager to learn and evolve as a believer in lifelong learning.

Experiences

Unity VR Developer – Greensky Games: Anomaly

since Jun 2024

A real-time multiplayer VR FPS extraction.

- **UI & Backend:** Developed modular UI elements for scalability and reusability, implemented a style-sheet system for easy design iteration, and worked on core systems including Vendor, Character Customization, and HUD. Localized the entire project and resolved various UI-related bugs.
- **AI Development:** Implemented HTN-based AI behavior using fluid hierarchical task network, improving enemy decision-making based on auditory and visual memory. Developed enemy perception, target acquisition, aggro spread, and state transitions, and applied various AI behavior tweaks and bug fixes.
- **Networking:** Many of my tasks involved networking-related challenges, including managing PlayFab and ensuring seamless multiplayer gameplay synchronization using Photon Fusion.
- **Art Integration:** Integrated avatar models and hand poses.
- **World & Scene Management:** Standardized the open world scene organization for better dev-artist collaboration, enabling area isolation, mesh combination, and art optimization.

Unity VR Developer – Greensky Games: SWARM 2

Dec 2023 - Jun 2024

A VR roguelike arcade shooter.

- **Gameplay & Systems:** Resolved various feature, visual, weapon, and system bugs; refined some modifiers/perks logic.
- **UI & Input Systems:** Fixed UI bugs, implemented Tips UI, and managed multi-VR platform input and controller mappings.
- **VFX & Art Integration:** Integrated visual effects and art assets.

Sole QA – Greensky Games: SWARM and SWARM 2

Jul 2023 - Dec 2023

- Ensuring quality across all game systems and platforms.
- Reviewed developer tasks and created detailed test scenarios to aid debugging.
- Developed a comprehensive test suite covering UI, perks, abilities, weapons, map performance, game modes, tutorial modules, game state, and VR compatibility across platforms, establishing a foundation for future QA teams.

Unity VR Developer – Sketchbox

Dec 2022 - Jul 2023

I contributed to developing immersive VR experiences and simulations designed to enhance trainee engagement through gamification. Our projects included government boat inspections and pre-flight aircraft inspections.

Personal Project – Mobile ARPG

2021-2022

A Mobile ARPG developed with Unity engine:

- Gameplay programming, UI, and other systems.
- Programming the networking (SA & CSP using Fish-Networking solution)
- Player and enemies' logic based on state machine pattern.
- Art and VFX integration.
- The making of game-ready assets (characters, weapons, enemies, environment, animations, and VFX)

3D Generalist on Upwork

2021-2022

Design and creation of 3D assets (modeling, sculpting, texturing, and animation) and the development of certain tools to automate and facilitate production.

Education

National Higher School Blida, Algeria.

2015-2020

Master's degree.

Skills

- **Gameplay & Systems Design:** Experienced in designing gameplay mechanics, features, and scalable systems.
- **Programming & Development:** Strong C# OOP skills, game programming patterns, and Unity (intermediate to advanced).
- **Networking & Multiplayer:** Expertise in Photon Fusion & Fish-Networking (Server authoritative - SA logic with client-side prediction - CSP).
- **3D & Art Integration:** Solid understanding of both artistic and technical 3D aspects, including meshes, VFX, and animations.
- **Mathematics & Optimization:** Strong 3D math skills for gameplay mechanics and physics-based systems.
- **Tools & Platforms:** Visual Studio, Git, GitHub, Blender, PlayFab, Jira, Trello, Miro, Davinci Resolve, Adobe Illustrator, Inkscape, Krita.
- **AI & LLM Integration:** Experience in programming and integrating LLMs in Unity for interactive applications.