MARWAN CHARAFEDDINE

Gameplay Engineer & Technical Designer

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PROFESSIONAL SUMMARY

Gameplay-focused developer creating playable, data-driven game systems in Unity and Unreal Engine. Experienced taking solo and collaborative projects from concept to playable releases, with strengths in mechanics design, engine implementation, tuning, UI/session flow, player feedback, and rapid iteration. Uses AI-assisted tooling responsibly to accelerate development workflows while retaining ownership of integration, reviewing, playtesting, and final design intent.

TECHNICAL SKILLS

Engines: Unity, Unreal Engine 5, Blueprints, URP, WebGL, Windows builds

Languages / Tools: C#, C++, Python tooling, Git, SteamPipeGUI, Arduino / serial workflows

Gameplay Systems: Player mechanics, procedural generation, data-driven tuning, state flow, UI/session flow, scoring, upgrades, economy loops, interactables, feedback systems

Production Strengths: Feature ownership, playtesting, iteration, documentation, debugging, version control, prototyping, packaging, QA mindset, AI-assisted workflows under strict review

PROJECT EXPERIENCE

Access Granted — Solo Developer / Technical Designer

Unity 6, C#, URP, WebGL + Windows

- Built and released a browser-playable reflex game combining block breaker mechanics with typed command challenges, slow-motion prompts, dual fail-state tracking, and level-based difficulty progression.
- Implemented CRT-inspired presentation, gameplay feedback, word-pool tuning, UI flow, WebGL deployment, and post-release patch iteration based on player feedback.

BREATHE Arcade — Gameplay / Systems Developer

Unity 6, C#, 2D URP, Capstone Project

- Built five breath-controlled microgames around one normalized input layer supporting custom fan hardware using an Arduino microcontroller and hobby motor. Also supports USB mic input and keyboard simulation.
- Implemented serial input handling, smoothing, spike rejection, shared scoring/results flow, and fallback controls so classroom and kiosk demos remain playable without the custom hardware.

OVERCLOCKED: Data Dash MAX — Solo Developer

Unreal Engine 5, C++ & Blueprints, PC + Arcade Cabinet

- Built a released endless runner with lane swapping, jump/slide movement, pickups, speed escalation, overclock bursts, medals, six distinct visual themes, and offline leaderboards.
- Authored 40+ obstacle pattern chunks with difficulty tiers and weighted progression, then tuned controls, HUD clarity, and pacing, for both desktop and arcade hardware.

Additional Experience

Independent Game Developer — Gold Leaf Interactive **· 2024–Present**
Shipped and maintained playable Unity and Unreal projects across itch.io, WebGL, Windows, Steam, game jams, coursework, and degree capstones. Built documentation, devlogs, portfolio pages, video showcases, and public project materials to support both review and playtesting.

Scheduler / Coordinator — Complete Digestive Disease Care **· 2023–Present**
Coordinate GI physician travel and locum scheduling, handle urgent itinerary changes, and assisting with IT needs.

EDUCATION

A.A.S., Digital Gaming & Simulation (Programmers)

Houston City College · Houston, TX · May 2026

B.S., University Studies of Veterinary Medicine

Concentration in Biomedical Sciences · Dual Minors: Psychology & Public Health
Texas A&M University · College Station, TX · May 2020