

MOHAMED WESSAM

Unity Gameplay & Systems Programmer

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SUMMARY

Unity/C# gameplay and systems programmer with 3+ years of commercial experience building multiplayer gameplay, reusable UI, tools, and backend integrations across released, public, and in-development games.

TECHNICAL SKILLS

Engines & Languages: Unity, C#, Unreal Engine, C++, Python

Gameplay & UI: UI Toolkit, UMG, ScriptableObjects, Addressables

Multiplayer & Backend: FishNet, Photon PUN, WebSockets, REST, NestJS, Redis, PlayFab, brainCloud

Architecture & Tools: MVC, VContainer, UniTask, Mono.Cecil, unit testing, CI/CD, Git

PROFESSIONAL EXPERIENCE

Freelance | Gameplay & Systems Programmer

2026

Hayfield (NDA)

Gameplay & UI Programmer

- Built reusable Unity UI components and standardized styling across player-facing screens, including navigation and localization support.
- Unified tutorial, panel-unlock, reward, and guidance flows into configurable, data-driven systems.
- Refactored player interactions and building placement with centralized input, profiling, and performance optimization.
- Created simulation and visualization tools to support economy and progression balancing.

Trenches

Gameplay & Systems Programmer

- Built a recoil-pattern system and editor for authoring and previewing weapon behavior without code changes.
- Centralized authentication, API, and Photon services with ordered startup and retries; implemented matchmaking and social flows.
- Migrated UI to UI Toolkit and MVC, added controller and mobile input, automated tests, and WebGL CI/CD deployment.

Game Hermits | Gameplay & Multiplayer Programmer

Jun 2023 - Aug 2026

Metin2 Remastered

Unity, C#, FishNet

- Led programming on a four-person team, later sharing technical leadership with a senior programmer; reengineered selected legacy C systems as reusable C# components.
- Architected server-authoritative FishNet gameplay across movement, combat, inventory, loot, quests, and progression with client prediction and server reconciliation.
- Reworked Addressables streaming and asset memory to stop recurring iPhone memory crashes; built distance-based logic LOD for tests with roughly 500 entities.
- Automated conversion of thousands of legacy records and assets into Unity-ready content, avoiding an estimated several weeks of manual migration.

Zamakan

Released on Steam

- Designed and shipped a pooled, designer-tunable procedural asteroid generator in Unreal C++ and Blueprints, plus UMG ship-selection, HUD, and pause flows.

SELECTED PROJECTS & PUBLIC CODE

Social Games Platform: Built Unity, NestJS, WebSockets, and Redis services for player state, friends, chat, and lobbies, plus deterministic billiards synchronization.

Async FishNet RPC: Extended generated RPCs with Mono.Cecil completion hooks, request IDs, and UniTask completion sources so callers can await matching responses.

EDUCATION

Mansoura University | BSc Computer Science (Software Engineering)

Sep 2022 - Jul 2026 | GPA: 3.72 / 4.0 | Ranked 5th in class