

# Chidera Nwosu

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Unity Gameplay Programmer & Systems Developer | Lagos, Nigeria | +2348135087498 |  
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## Professional Summary

Results-driven Unity Developer with 5+ years of hands-on Unity and C# experience, and 2+ years of professional experience in gameplay programming, systems development, and UI/UX for mobile, WebGL, and PC platforms. Proven track record leading game development from concept to deployment, with strong capabilities in AI systems, performance optimization, and procedural generation. Adept at working in remote, agile teams and delivering modular, scalable tools and systems. Passionate about creating immersive and polished player experiences.

## Education

### B.SC | 2025 | UNIVERSITY OF NIGERIA

- Major: Computer Science
- Minor: Statistics
- Related coursework: Data Structures and Algorithms, Software Engineering, Computer Graphics, Linear Algebra, Probability and Statistics

## Skills & Abilities

### TECHNICAL SKILLS

- Languages & Tools: C#, Unity Engine (2D & 3D), Git, RESTful APIs, DoTween, Unity Addressable, Shader Graph, Unity Cloud Services, Web3 (TON, AEON, Starknet).
- Optimization & Architecture: Object Pooling, Memory Management, Procedural Generation (Wave Function Collapse), NavMesh Baking, GC Optimization, AES Encryption, GZip Compression
- Animation & Visuals: Mecanim, Combat Feedback, VFX, Scene Transitions, URP/HDRP

### GAME DEVELOPMENT SKILLS

- Gameplay Systems Design
- Mobile & PC Game Development
- Multiplayer & Netcode
- Performance Optimization & Resource Management
- Modular Tool Development (Unity Editor Extensions)
- Saving Systems (Custom Binary, AES Encryption, GZip)
- Dialogue & Quest System Architecture (Inkle Studio)

### SOFT SKILLS

- Agile & Scrum Methods
- Remote Team Collaboration
- Problem Solving & Debugging

- Communication & Documentation
- Creative Thinking & Iteration

## Experience

### GAME PROGRAMMER | SUNSET LABS | NOVEMBER 2024 – NOW

- Promoted from collaborator to maintainer within one month; transitioned into a full-time role.
- Developed Unity-side API systems for Web3 features (minting, inventory, item use) with full serialization, error handling, and test scenes.
- Overhauled combat mechanics, AI/NPC gun systems, camera behavior, and weapon effects for smoother, more dynamic gameplay.
- Created modular UI systems for Character Selection, Inventory, Shop, and Dialogue; improved scene transitions and UI responsiveness.
- Refactored inventory for cross-scene persistence and real-time item equipping/swapping during combat.
- Enhanced visuals: lighting, VFX, environment polish, animation responsiveness, and scene stability.

### GAME PROGRAMMER | CONTRACT FOR GGJ AND US DEPT OF STATE (DISINFORMATION GAME) | DECEMBER 2024 – NOW

- After winning the **Global Game Jam for Africa**, collaborated with a small team to bring the award-winning prototype to full release within one month.
- Migrated the game project to mobile platforms under tight deadlines, integrating on-screen input systems and improving input responsiveness for touch controls.
- Transitioned the project to Live-Ops, enabling real-time updates, analytics, and better player retention capabilities.
- Rebuilt and optimized core gameplay mechanics to enhance engagement and ensure performance consistency across devices.
- Engineered a secure and efficient save system using AES encryption and Gzip compression, reducing file size and I/O latency.
- Implemented a custom binary format for saving, and gained proficiency with Unity PlayerPrefs and JSON serialization for data handling.
- Designed and deployed a directional navigation system to guide players intuitively through levels, increasing game clarity.
- Refactored existing quest and dialogue systems to be fully modular and scalable using Unity state machines and event-driven architecture.
- Developed NPC autonomy to enrich world-building and enhance the game's educational (edutainment) objectives.

### LEAD GAME DEVELOPER | ONION AI | JUNE 2024 – FEBRUARY 2025

- Developed core **gameplay systems** for a WebGL-based game, including player movement, combat, bonus systems, and enemy behaviors.
- Implemented object pooling and memory management strategies to reduce garbage collection and improve runtime performance, especially for frequent instantiation scenarios.
- Used splines to create smooth, cyclic enemy movement patterns for dynamic level design.

- Integrated Web3 smart contracts and features using the Ton Ecosystem and AEON API, enabling secure in-game asset handling and blockchain interactions.
- Leveraged Unity's Addressable System and Cloud Content Delivery to improve loading performance and streamline Web3 data access.
- Designed and animated characters using Unity's Mecanim and sprite systems for polished, responsive visuals.
- Built leaderboards and player profile systems using Unity Cloud Services, ensuring seamless cross-session data persistence.
- Played a key role in Onion AI's partnership with Pixel Pai, contributing to successful Web3 gameplay integration.
- Collaborated cross-functionally with designers and developers to implement scalable solutions that enhance both performance and user experience.
- Increased Games FPS from 25fps to 55fps on low level devices, reduced game size by 80% and switched to unity addressable for dynamic and async loading and increase initial game loading time

#### **LEAD GAME DEVELOPER | JOYSTICK LABS | AUGUST 2023 – DECEMBER 2024**

- **Designed, developed, and optimized core gameplay and physics mechanics** for a 3D vehicular combat game, targeting high performance across PC and mobile platforms.
- Engineered a **realistic vehicular system**, including AI-controlled vehicle behavior for speed modulation, overtaking logic, directional control, and combat-based decision-making using a custom **Target Score System**.
- Implemented **AI difficulty scaling**, enemy attack patterns, and health systems to create a dynamic and challenging gameplay experience.
- Developed and integrated **weapon rotation mechanics**, mesh deformation systems, and responsive combat feedback for immersive gameplay.
- Led the development of **modular gameplay systems and custom Unity Editor Tools**, accelerating iteration and prototyping speed.
- Tasked with UI/UX development late in production, creating **menu systems, in-game HUDs and scene transitions** leveraging prior UI expertise.
- Acted as a **cross-functional consultant**, providing design guidance to the web and software teams on game mechanics and user engagement strategies.
- Collaborated closely with artists and designers to ensure the game delivered **polished, engaging, and visually compelling** experiences before the project was paused due to funding issues.

#### **GAME DEVELOPER AND UI/UX DEVELOPER | QUIVA STUDIOS | JULY 2023 – AUGUST 2023**

- Designed and implemented **modular and reusable UI systems** for *Cyber Spawns*, a mobile card game, ensuring maintainability and scalability across scenes.
- Developed core UI components including menu systems, item/card slots, scene transitions, and interactive animations, based on design specifications.
- Engineered cross-scene UI elements (like inventory/item slots) to preserve continuity and reduce redundancy.
- Collaborated closely with UI/UX designers to bring their visions to life, ensuring responsive and intuitive user interactions.

- Contributed to enhancing game performance and user experience through optimized UI architecture and animation timing.
- Worked in an agile environment, coordinating effectively with designers, artists, and fellow developers to meet tight deadlines.

## **Notable Awards**

### **GLOBAL GAME JAM AFRICA – FIRST POSITION**

Had an Entry to Global Game Jam Democracy Game Jam for Africa and finished first, The game is available on PC but currently integrating for mobile Development it's an edutainment but also beat-em up style game that's going to be used to teach about the dangers of fake news and how to spot fake news, currently working on fully releasing the game for both the GGJ and US Consulate, Worked on autonomous systems for the NPC, Dialogue and Quest Systems making use of Inkle Studios for the Former and Using DoTween and state machines to create a smooth Dark Knight like Combat System for the game's beat em up Style.

## **Personal Projects**

### **MAELSTROM (IN DEVELOPMENT)**

- Solo-developed third-person shooter inspired by Twisted Tower
- Environment evolves every 10 minutes using Wave Function Collapse
- Implemented dynamic AI, shooting logic, procedural NavMesh re-baking
- Utilized DoTween for animated instantiation and weapon systems
- Designed around scalability and high performance for chaotic level layouts