

Elias Hernandez

Game Programmer | Unreal Engine | Unity | Systems & Multiplayer Specialist

Germany

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SKILLS

Languages

C#, C++, Java, Python, Unreal Blueprints

Engines

Unreal Engine 5, UE4, UE3, Unity, Godot, MonoGame, LibGDX, Custom Warfare Engine

Multiplayer

Netcode & Rollback, Player Sync, Anti-Cheat, Custom Physics Sync, Rollback Netcode, Photon

Gameplay

Card Combat, Hero Sequencing, Turn-Based Tactics, Physics & Ragdoll, Dynamic Destruction

AI & Gen

AI & Pathfinding, Faction AI, Squad AI, Procedural Gen, Factory Automation, Wave Systems

Graphics

Virtual Shadow Maps, TSR, Niagara VFX, Sequencer, Unreal Insights, Rendering Pipelines

Performance

60 FPS Optimization, Simulation Tick Scaling, Legacy Engine Refactoring

Genres

Competitive Multiplayer, Metroidvania, Simulation, Factory/TD, Turn-Based, Card RPG, Physics Brawler, Narrative RTS

LANGUAGES

English

EDUCATION

Teesside University,
Middlesbrough, UK

BSc (Hons) Computer Games Programming
2011 – 2014

University of Hertfordshire,
Hatfield, UK

MSc Games Development
2014 – 2015

Summary

Game Programmer with 9+ years of commercial shipping experience specializing in Unreal Engine, Unity, MonoGame, LibGDX, and custom engines. Proven track record across indie metroidvania, realistic simulations, factory automation/TD hybrids, turn-based tactics, card-based RPGs, physics-driven party brawlers, narrative RTS, and competitive live-service multiplayer titles. Skilled in gameplay systems programming, netcode/rollback, physics/ragdoll simulation, AI/pathfinding, procedural generation, and performance optimization. Recently owned senior multiplayer infrastructure and live-service launch on REMATCH (UE5 competitive 5v5 football) from early access to full release.

EXPERIENCE

[REMATCH – Senior Multiplayer Programmer](#)

March 2024 – June 2025

Owned core 5v5 online football controls, team coordination, and third-person action systems in Unreal Engine 5, delivering fast-paced competitive gameplay. Implemented robust netcode, anti-cheat measures, player synchronization, Virtual Shadow Maps, and Temporal Super Resolution to maintain 60 FPS across all platforms.

Led multiplayer infrastructure, feature ownership, and team mentoring, ensuring competitive integrity from early access through full launch.

Technical Skills:

Unreal Engine 5 | 5v5 Multiplayer Controls | Robust Netcode & Anti-Cheat | Player Synchronization | Virtual Shadow Maps | Temporal Super Resolution | 60 FPS Optimization | Live-Service Infrastructure

Cross-Functional Skills:

Senior Technical Leadership | Team Mentoring | Feature Ownership | Live-Service Launch | Competitive Integrity | Cross-Platform Coordination | High-Stakes Polishing

[Terminator: Dark Fate – Defiance – Senior RTS Programmer](#)

October 2023 – February 2024

Adapted rapidly to a custom Warfare engine to implement modular unit damage, dynamic battlefield destruction, faction AI, and real-time physics pipelines.

Reverse-engineered core systems and optimized destruction/performance pipelines under compressed timelines for varied hardware.

Delivered narrative-driven mission and resource management systems in a real-time strategy campaign.

Technical Skills:

Custom Warfare Engine | Modular Unit Damage | Dynamic Battlefield Destruction | Faction AI Systems | Real-Time Physics Pipelines | Narrative Mission Systems | Resource Management | Performance Tuning

Cross-Functional Skills:

Rapid Engine Adaptation | Reverse-Engineering | Studio Transition Resilience | Compressed-Timeline Delivery | Narrative Integration | RTS Genre Specialization

[Party Animals – Lead Gameplay Programmer](#)

January 2023 – September 2023

Led physics-driven multiplayer interactions, ragdoll destruction, and fully interactive environments in Unity, creating chaotic emergent party-brawler gameplay.

Resolved critical networking desyncs and latency issues using custom physics

synchronization and rollback techniques for smooth 8-player online sessions.

Directed feature implementation, optimization, and team mentoring while transitioning from prototype to polished live-service multiplayer.

Technical Skills:

Unity Engine | Physics & Ragdoll Systems | Interactive Environment Destruction | Custom Physics Synchronization | Rollback Netcode | Latency & Desync Resolution | 8-Player Multiplayer | Emergent Gameplay

Cross-Functional Skills:

Team Leadership as Lead | Prototype-to-Live-Service Transition | Unity Physics Mentoring | High-Energy Multiplayer Delivery | Accessibility Implementation | Cross-Team Coordination

Marvel's Midnight Suns – Senior Systems Programmer

May 2020 – December 2022

Engineered card-based combat, hero ability sequencing, relationship progression, and base-management systems in Unreal Engine 4 for a large-scale licensed tactical RPG.

Optimized complex hero VFX and ability systems using Unreal Insights, Niagara, and Sequencer to ensure 60 FPS stability across diverse hardware.

Integrated narrative and deck-building layers with gameplay loops through cross-discipline collaboration while adapting to evolving scope.

Technical Skills:

Unreal Engine 4 | Card-Based Combat | Hero Ability Sequencing | Niagara VFX | Sequencer Cinematic | Unreal Insights Profiling | 60 FPS Stability | Narrative Integration

Cross-Functional Skills:

Cross-Discipline Collaboration | Scope Adaptation | Senior Feature Ownership | Player Retention Focus | High-Profile AAA Delivery | Complex System Integration

XCOM: Chimera Squad – Senior Gameplay Programmer

October 2019 – April 2020

Implemented interleaved turn-based tactical combat, breach mechanics, agent ability systems, and squad-based AI on Unreal Engine 3 in a fast-paced AAA environment.

Optimized legacy engine code for new AI decision trees and unrest mechanics, resolving frame-rate and balancing issues under aggressive deadlines.

Mentored junior team members on tactical systems and refactoring while maintaining franchise fidelity.

Technical Skills:

Unreal Engine 3 | Turn-Based Tactical Combat | Breach Mechanics | Squad-Based AI | Agent Ability Systems | Legacy Code Optimization | Frame-Rate Balancing

Cross-Functional Skills:

Junior Mentoring | Large AAA Team Collaboration | Franchise Fidelity | Narrative-Driven Strategy | Senior Refactoring Ownership | Deadline Management

Mindustry – Systems Programmer

October 2018 – September 2019

Developed factory automation, resource logistics, procedural wave generation, and unit AI systems in Java/LibGDX, managing thousands of units in real-time.

Rewrote pathfinding algorithms and optimized simulation ticks to resolve severe scalability bottlenecks in co-op/PvP multiplayer on low-end hardware.

Contributed to open-source procedural content tools with live community-driven updates.

Technical Skills:

Java | LibGDX Framework | Factory Automation | Procedural Wave Generation | Pathfinding Optimization | Simulation Tick Scaling | Unit AI Behaviors | Open-Source Tools

Cross-Functional Skills:

Open-Source Contribution | Community-Driven Updates | Low-End Hardware Optimization | RTS/TD Hybrid Architecture | Live Server Support | Large-Scale Real-Time Systems

Fishing Sim World: Pro Tour – Gameplay Programmer

June 2017 – September 2018

Built realistic fishing mechanics in Unreal Engine 4, including physics-based rod casting, dynamic fish AI, and environmental simulation (weather, currents, equipment wear).

Designed modular state machines and procedural event systems to solve inconsistent AI responses and improve player immersion.

Integrated licensed content and multiplayer lobby features using C++ and Blueprints for cross-platform optimization.

Technical Skills:

Unreal Engine 4 | Physics-Based Casting | Dynamic Fish AI | Environmental Simulation | Modular State Machines | Procedural Event Systems | C++ & Blueprints | Cross-Platform Optimization

Cross-Functional Skills:

Large-Scale Data-Driven Development | Production-Ready Simulation | Engine Transition (MonoGame to UE4) | Player Immersion Focus | Licensed Content Integration | Stakeholder Collaboration

Salt and Sanctuary – Junior Gameplay Programmer

October 2015 – May 2016

Implemented core 2D combat, platforming, and progression systems in a custom MonoGame engine, mastering pixel-perfect collision and sprite animation blending.

Optimized rendering pipelines and basic pathfinding to eliminate frame drops in large interconnected pixel-art worlds.

Collaborated in a 2-person indie team to ship a complete Souls-like metroidvania from prototype to launch under tight constraints.

Technical Skills:

C# | MonoGame | Custom Engine | Pixel-Perfect Collision | Sprite Animation Blending | Rendering Pipeline Optimization | Basic Pathfinding | 2D Combat & Platforming

Cross-Functional Skills:

Small Indie Team Collaboration | Rapid Prototyping | Full Game Lifecycle | Iterative Balancing | Self-Directed Problem Solving | Tight-Constraint Delivery | Foundational Commercial Shipping