JOSEPH GOROSPE

% josephgorospe.com | ☑ jragorospe@gmail.com | ७ +1-587-899-4094 | 🛅 linkedIn/joseph-gorospe | 🦪 github.com/jragorospe

SKILLS

Unreal Engine 5 3D Mathematics Multiplayer Programming Live Service Development
C++ Al Programming Automated Testing Cross-functional Collaboration
Blueprints Animation Programming Profiling and Optimization Leadership and Mentorship

WORK EXPERIENCE

INFLEXION GAMES | GAMEPLAY PROGRAMMER II

Edmonton, Alberta | April 2022 - November 2024

Nightingale 🗹

- Shipped *Nightingale*, a multiplayer survival crafting game built in Unreal Engine 5, into Early Access and maintained various gameplay systems including encounters, creatures/Al, animation, and world generation in Live Service.
- Developed many parts of the encounter system, a multiplayer event system combining various aspects of *Nightingale's* gameplay, including puzzle, combat, and building encounters, persistence, replication, automated testing, and debug tooling.
- Acted as the primary point of contact for the encounter system, collaborating cross-functionally with other teams to align features with the game's vision, maintain the integrity of other systems, and identify the fun.
- Spearheaded data authoring improvements through validation tools, automation/rulesets, and streamlining the development of new POIs and encounters, significantly reducing bugs and time spent on authoring and debugging.
- Bridged the gap between encounter and AI systems, adding boss support, improving close-quarters combat, revamping enemy distribution, centralizing the spawning system, and supporting the development of new creatures and creature-centric POIs.
- Developed level design actors including pickups that grant progression unlocks, gameplay abilities, and currency, interactable structures, and tileset actors including gates, pressure plates, and bustable walls, encouraging exploration and POI engagement.
- Supported the creation of procedurally generated dungeons and worlds through the development of a POI distribution subsystem and designer tools, enabling precise placement of bespoke content alongside procedural elements.

ZUGALU | GAME DEVELOPER / WEB DEVELOPER

Calgary, Alberta | February 2021 - February 2022

Thrive: Heavy Lies the Crown

- Developed core gameplay systems for *Thrive: Heavy Lies the Crown*, a multiplayer city builder RTS game built in Unity3D, including the weather system, territory manager, and daily event system.
- Coauthored a Discord chat game, engaging our community, quadrupling our message count, and achieving Discord partnership.

PROJECTS

SURVIVAL CRAFTING ROGUELIKE

- Currently developing a survival crafting roguelike using my Wave Survival Game framework.
- Implementing features including procedural map generation using Perlin noise and level streaming for POIs, an inventory system, melee combat, and survival mechanics, using Unreal's Gameplay Ability System.

WAVE SURVIVAL GAME

Github Link 2

- Developed a fully networked third-person wave survival game from scratch in Unreal Engine 5.
- Implemented character movement, an interaction component, an action/attribute system (GAS-inspired), hitscan and projectile attacks, pickups, enemy AI, an event-driven UI system, game mode logic, and optimizations including async asset loading.

ARACHNID ANIMATION STUDY

YouTube Link 2

- Developed a procedurally generated scorpion walk cycle using Control Rig in Unreal Engine 5.
- Implemented a Control Rig Forward Solve algorithm that calculates the location of each leg's step using sphere traces, locking/unlocking each leg until it reaches a distance threshold, and cycling through each leg to simulate realistic movement.

EDUCATION

BSc Computer Science, Minor of Philosophy

Calgary, Alberta | June 2020

UNIVERSITY OF CALGARY

VOLUNTEER EXPERIENCE

SUNAGO August 2024 - Present

My wife and I founded a charity supper club called Sunago, where we've hosted over a dozen dinners and raised thousands of dollars for charities like Edmonton's Food Bank. This has allowed us to strengthen our ties with our community, foster a spirit of giving, and raise awareness of the impact made by local charities.