

Skyler Boelts

Washington, United States of America | contact@SkylerBoelts.com | in/skylerboelts/ | SkylerBoelts.com | Open to Relocation

PROFESSIONAL SUMMARY

Gameplay Programmer specializing in multiplayer and systems-driven games. Skilled at developing gameplay systems that align with creative vision while ensuring flexibility for iteration and balance tuning. Experienced Technical Producer with a strong ability to collaborate across disciplines, communicate effectively, and manage tasks efficiently.

EXPERIENCE

Teacher's Assistant - Multiple Courses

August 2020 - Present

DigiPen Institute of Technology

Redmond, WA

- Freshman Game Project - Guided teams of students making games in a custom C++ engine.
- Sophomore Game Project - Mentored students as they made custom C++ engines for cross-discipline teams.
- Level Design Methods - Advised students as they created a procedurally generated 2D level and a hand-crafted 3D level.
- System Design Methods - Assisted students working on economic and combat simulators.
- Technical Design Methods - Facilitated student learning to use command design patterns to control game logic.

PROJECTS

Multiplayer Gameplay Programmer | Network Programmer

August 2024 - Present

Eidolon: Fate of Fools | Online First person Arena Shooter (Unreal Engine 5)

- Developed the core weapon systems using Unreal's Gameplay Ability System to create over 20 abilities including movement abilities and status effects.
- Iterated on mechanics, weapon balance, and spawn rates based on implemented telemetry and playtester feedback.
- Coordinated multiple playtests of the Steam network systems, including a 40+ in-person public stress test
- Trained team programmers in network programming best practices and consistently audited all client-side network code, reducing RPCs by 30%.
- Profiled and optimized network performance for the best player experience in low-bandwidth or high latency scenarios resulting in a 50% reduction in bandwidth usage.

Multiplayer Gameplay Programmer | Producer

August 2023 - April 2024

Cats N Critters | 3D Roguelite Dungeon Crawler (Unity)

- Implemented custom player controller and drop-in, drop-out local multiplayer for up to 4 players.
- Created an robust ability system with over 20 spells used by players and integrated with enemy AI.
- Balanced player abilities based on the cost analysis specifications of other designers.
- Used Unity's Cinemachine camera system to create a dynamic camera that captured hectic gameplay while evoking a toylike feeling.
- Managed a cross-discipline team of 10 people by scheduling meetings, planning 15+ weekly sprints, facilitating communication, and organizing task tracking software daily.
- Released on Steam with over 90% positive reviews .

Engine Programmer | Producer

August 2022 - April 2023

Inline: Out of Time | 2D Time-Attack Platformer (C++ Custom Engine)

- Architected a custom C++ Engine in an entity component system style and with multi-scene support.
- Built a custom editor and inspector for use by designers and artists through DearImGui and serialized through RapidJSON, alongside level editor support through Tiled.
- Assisted in Player Controller refactoring and bug fixing.
- Led a cross-discipline team of 12 people by scheduling meetings, planning sprints, facilitating communication, and organizing task tracking software.
- Submitted to Steam with over 90% positive reviews.

EDUCATION

Bachelor of Science in Computer Science and Game Design

Expected April 2025

DigiPen Institute of Technology

Redmond, WA, USA

TECHNICAL SKILLS

Languages: C/C++, C#, C# for Unity, C++ For Unreal Engine, Lua, Python, Javascript

Game Engines: Unity Engine, Unreal Engine, Unreal Blueprints, Unreal Engine's Gameplay Ability System, C++ Custom Engine, Pico-8

Multiplayer & Networking: Network Programming (TCP/IP, UDP), Network Profiling, RPCs, Replication, Client-Side Network Code Development, Optimizing Network Performance.

Programming: Serialization and Deserialization, Network Optimization, Performance Optimization, Object-Oriented Programming, Data Structures, Multithreaded Programming, Game Physics and Collision, Data Structures, Memory Management, Algorithm Analysis, Agent Artificial Intelligence, Engine Architecture, Debugging, Unit Testing, Code Documentation, Technical Game Design, Code Reviews, Pairs Programming, 3D Vector Math, Linear Algebra, Multivariable Calculus

Tools & Tech: Subversion SVN, Git, Github, Perforce, Figma, Tiled, Excel, Trello, ClickUp