

User Interface Programmer

Inspired programmer with 2+ years of game industry experience emphasizing UI/UX development for consoles, PC, mobile and AR/VR applications. Driven by collaboration with multidisciplinary teams in an iterative and agile environment. Recognized for elevating professional projects with commitment to quality and innovation.

EDUCATION

Bachelor of Science, Computer Science
California State Polytechnic University, Pomona, CA

Cum Laude
Major GPA: 3.6/4.0

EXPERIENCE

INFINITY WARD | UI Scripter – Call of Duty: Modern Warfare **10/2018 – Present**

Implement, maintain, optimize, and expand a wide array of core UI features and systems, both front-end and in-game, for single player, co-op, and multiplayer modes using C++, Lua, and proprietary tools.

- ◆ Develop and maintain UI features as the owner of loot/customization menus, player comms/CRM systems, single player and co-op frontend flows, store/battlepass features, and various in-game HUD elements.
- ◆ Collaborate with network engineers to implement, improve, and debug player challenge/level progression systems, custom game lobby setup flows, and cross-platform player profile and party features.
- ◆ Commended for supporting designers and artists by identifying and solving technical roadblocks.
- ◆ Maintain existing UI development tools and optimize or develop systems to facilitate new designs.
- ◆ Support controls for multiple input types (gamepad/keyboard) on PC and consoles (PS4/Xbox One).
- ◆ Implement telemetry to track information about player interactions with UI features for data analysis.
- ◆ Participate in code reviews, promoting readable, maintainable, and extensible UI widgets and systems.
- ◆ Debug, resolve, and provide feedback on both technical and design related UI issues.

WAREPLAI | Gameplay Programmer **01/2018 – 08/2018**

Created core gameplay features for augmented reality games using Unity with Vuforia and ARKit/Core.

- ◆ Developed a successful game prototype that achieved 235% of its Kickstarter goal. (tiny.cc/ReignOfCthulhu)
- ◆ Enhanced performance and memory efficiency on mobile devices for multiple platforms and resolutions.
- ◆ Created simple custom shaders in HLSL to mask and project objects for seamless AR transitions.
- ◆ Streamlined integration of assets by coordinating with stakeholders and teams of artists and engineers.

BLIZZARD ENTERTAINMENT | Software Engineer Intern **06/2017 – 09/2017**

Developed, from prototype to final product, a rich single-page web application using JavaScript with WebGL.

- ◆ Exceeded expectations by proposing and prototyping a new feature that became the project's centerpiece.
- ◆ Created a 3D rendered display of large real-time data streams from Protocol Buffers over WebSockets.
- ◆ Interfaced with asynchronous operations of APIs using promises, callbacks, and robust error handling.
- ◆ Solved a critical framerate limitation using object pooling and object-oriented patterns with WebGL.

PERSONAL PROJECTS

Augmented Realms | AR Tabletop RPG Simulator (Unity, HTC VIVE) **12/2017**

- ◆ Built tools for a procedural mesh-based level editor shared live over a multiuser Photon network.

Red Dwarf | VR Space Sim Game (Unity, HTC VIVE) **05/2017**

- ◆ Implemented world space UI, weapon physics, and player controls using SteamVR and VRTK.

Elemental Fury | VR Multiplayer Game ("3rd Place Overall" at BeachHacks 2017) **04/2017**

Battle of the Bards | Rhythm/RPG Game ("2nd Place Overall" & "Best Game" at HackPoly 2017) **02/2017**

ORGANIZATIONS

International Game Developer Association | Chapter Board Member **09/2018 – Present**

Student Game Developer Alliance (sgda.io) | **Founder, Outreach Director** **02/2017 – Present**

Cal Poly Pomona Game Design & Development Club | President **03/2016 – 06/2017**

TECHNICAL SKILLS

Languages: (Proficient) C# ◆ C++ ◆ Lua (Prior Experience) Java ◆ JavaScript ◆ Python

Tools/APIs: Unity 5+ ◆ Visual Studio ◆ Perforce ◆ Git ◆ VRTK ◆ OpenGL ◆ WPF ◆ JIRA ◆ Confluence

Experience: UI Engineering Patterns ◆ Object-Oriented Design ◆ Optimization & Profiling ◆ Agile/Scrum

◆ Memory Management ◆ VR/AR Development ◆ Client-Server Model ◆ 3D Graphics/Math