

Software Engineer

Inspired programmer with 3 years of experience in PC, web, and mobile development with an emphasis on front-end applications and computer graphics. Proven leader driven by collaboration with multidisciplinary teams in an iterative 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

EXPERIENCE

WAREPLAI | R&D Engineer (wareplai.com) **01/2018 – Present**

Implementing core features for augmented reality applications using Vuforia and ARKit.

- ◆ Enhanced performance and memory efficiency on mobile devices by profiling and optimizing code base.
- ◆ Utilized custom shaders to mask and project objects for seamless AR transition effects.

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

Developed a rich single-page web application using JavaScript with WebGL, React, and Node.js.

- ◆ Created a 3D rendered display of large real-time data streams from Protocol Buffers over WebSockets.
- ◆ Solved a critical framerate limitation using object pooling and object-oriented patterns with WebGL.
- ◆ Implemented complex UX wireframe designs, negotiating with designers to solve technical challenges.
- ◆ Architected maintainable systems using reflection techniques to integrate with evolving databases/APIs.
- ◆ Participated in sprint planning to outline stakeholder requirements in an Agile/Scrum environment.
- ◆ Collaborated directly with artists, program managers, and fellow engineers utilizing JIRA and Confluence to coordinate tasks, Jenkins for CI/CD, and Git for code sharing and reviews.

GOOGLE APPLIED CS PROGRAM | Student Programmer (g.co/appliedcscskills) **04/2016 – 06/2016**

Created Android applications with Java and Android Studio as part of a pilot program for a select group of students that reinforces concepts from data structures and algorithms, as well as artificial intelligence.

PROJECTS

Augmented Realms | AR Tabletop Game Simulator (Android/iOS) **12/2017 – Present**

- ◆ Building editor tools for a procedural mesh grid shared live over a multiuser network. (Unity3D, C#)

inVRasion | VR Multiplayer Game (HTC Vive/PlayStation VR) **09/2017 – Present**

- ◆ Developing UI, AI, equipment physics, and player locomotion using SteamVR and VRTK. (Unity3D, C#)

SimpleCraft | Custom Voxel Engine (PC) **09/2017**

- ◆ Implemented camera controls, collision detection, and terrain generation using Perlin noise. (OpenGL, Java)

Elemental Fury | VR Multiplayer Game (HTC Vive) **04/2017**

- ◆ Implemented battle mechanics, player controls, and client-side network using Photon/PUN. (Unity3D, C#)
- ◆ Won "3rd Place Overall" at BeachHacks 2017.

Battle of the Bards | Rhythm/RPG Game (PC) **02/2017**

- ◆ Created UI, turn-based mechanics, procedural rhythm mechanics, and particle systems. (Unity3D, C#)
- ◆ Won "2nd Place Overall" and "Best Game Hack" at HackPoly 2017.

LEADERSHIP

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

Founded the largest student-organized game development association in California, dedicated to facilitating game development for 200+ students from 9 universities by organizing educational events and competitions.

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

Lead a new student club focused on enabling students to grow technical and teamwork skills through game development, mentoring 60+ members and coordinating large studio-like teams of multidisciplinary students.

TECHNICAL SKILLS

Languages: C# ◆ C++ ◆ Java ◆ JavaScript ◆ Python ◆ HTML/CSS

Tools: Unity 5+ ◆ OpenGL ◆ GIT ◆ Visual Studio ◆ .NET ◆ React ◆ Xcode ◆ Android Studio

Concepts: UI Implementation ◆ 3D Graphics/Math ◆ Mobile Optimization ◆ AR/VR ◆ Agile/Scrum
◆ Object-Oriented Patterns ◆ Memory Management ◆ Debug Testing/Profiling