

Software Engineer

Inspired programmer with experience in PC, web, and mobile development emphasizing front-end applications, AR/VR applications, and graphics. Proven leader 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

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

Implementing core features for Android and iOS augmented reality applications using Unity with ARKit/Core.

- ◆ Enhanced performance and memory efficiency on mobile devices by profiling and optimizing code base.
- ◆ Developed a successful game prototype which achieved 250% of its fundraising goal via Kickstarter.
- ◆ Managed app submission and review process for Google Play and Apple iTunes stores.

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 UI wireframe designs, negotiating with designers to outline technical requirements.
- ◆ Performed performance and verification testing using Chrome DevTools to identify and resolve bugs.
- ◆ Collaborated with designers, program managers, and fellow engineers in an Agile/Scrum environment, utilizing JIRA for task management, Confluence for technical documentation, and Git for code reviews.

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

Created native Android apps with Java as a select member of Google's first Applied CS development program. Developed game logic and AI using heuristics, dynamic programming, and fundamental data structures.

PROJECTS

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

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

Red Dwarf | VR Space Sim Game (HTC Vive) **09/2017 – Present**

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

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

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

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

- ◆ Implemented combat 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 ◆ Python ◆ JavaScript ◆ HTML/CSS

Tools: Unity3D ◆ GIT ◆ Visual Studio ◆ Android Studio ◆ Xcode ◆ React ◆ Unreal Engine 4 ◆ OpenGL

Proficiencies: UI Implementation ◆ 3D Graphics/Math ◆ Mobile Optimization ◆ AR/VR ◆ Agile/Scrum
◆ Object-Oriented Patterns ◆ Memory Management ◆ Computer Networks ◆ QA Testing/Profiling