

Associate Software Engineer

Inspired and dynamic programmer with 3 years of experience in game development for PC, web, and mobile. Proven leader driven by collaboration with multidisciplinary teams. Recognized for being versatile, outgoing, creative, and meticulous. Seeking a challenging entry-level role in tools, UI, graphics, or gameplay programming.

EXPERIENCE

ARVADA LABS | R&D Engineer (tiny.cc/arvadalabs) **01/2018 – Present**

Implementing core gameplay feature prototypes using Unity for an augmented reality multiplayer card game.

- ◆ Improving performance and memory efficiency on mobile devices by profiling and optimizing code base.
- ◆ Streamlining integration of assets by acting as main coordinator between teams of artists and engineers.
- ◆ Created custom shaders to mask and project objects for seamless portal effects within the game world.

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

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

- ◆ Created a 3D rendered display of large real-time data streams from protobuf websockets.
- ◆ Solved a critical framerate issue, using object pooling and object-oriented patterns with WebGL.
- ◆ Enhanced the project by developing a keystone feature, outside the initial scope, during a hackathon.
- ◆ Implemented detailed UX design and animation specifications with Javascript and CSS.
- ◆ Collaborated directly with artists, program managers, and fellow engineers in an Agile/Scrum environment, 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/appliedcsskills) **04/2016 – 06/2016**

Created Android apps with Java and Android Studio as part of a pilot program for a select group of students.

PROJECTS & AWARDS

Augmented Realms | Independent Team Project **12/2017 – Present**

Developing, with Unity and C#, the world building tools, RPG gameplay mechanics, UI, and augmented reality functionality using Vuforia for a multiplayer mobile app designed to enhance tabletop RPG gaming.

inVRasion | Independent Team Project **09/2017 – Present**

Building, with Unity and C#, the UI, AI, player movement, and weapon mechanics for an asymmetric multiplayer virtual reality FPS game in development for HTC Vive and PlayStation VR devices.

Elemental Fury | 3RD Place Overall – BeachHacks **04/2017**

Implemented, with Unity and C#, the client-side network using Photon Unity Networking, player controls, and spell mechanics for a multiplayer virtual reality game using networked HTC Vive devices.

Battle of the Bards | 2ND Place Overall & Best Game – HackPoly **02/2017**

Created the UI, turn-based combat mechanics, procedural audio, and particle systems for an RPG/rhythm game, interfacing with artists and designers to execute their vision for the game and integrate custom assets.

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 inspiring and facilitating game development for 200+ students from 9 universities by organizing educational events.

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

Lead a new student club focused on preparing students for game industry careers, mentoring 60+ members by hosting workshops and coordinating large studio-like teams of multidisciplinary students to develop games.

TECHNICAL SKILLS

Languages: (3 years) C# ◆ C++ ◆ Java (1 year) JavaScript ◆ Python ◆ Lua ◆ HTML/CSS

Tools: Unity ◆ GIT ◆ Visual Studio ◆ Xcode ◆ Android Studio ◆ .NET ◆ WPF/WinForms ◆ OpenGL ◆ JIRA

Key Concepts: Game Development ◆ Mobile (Android/iOS) ◆ 3D Graphics/Math ◆ Memory Management
◆ Object-Oriented Programming ◆ UI Implementation ◆ Computer Networks ◆ AR/VR ◆ Agile/Scrum

EDUCATION

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

Cum Laude (Major GPA: 3.6)
(Graduation: December 2017)