# **BRIAN HERMAN**

# Gameplay / Network Programmer

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## **SUMMARY**

Versatile and driven gameplay and network programmer with 5+ years of professional experience delivering multiplayer systems and tools. Proven ability to design and implement complex features, build robust CI/CD pipelines, and optimize network performance across various engines and platforms. Adept at collaborating across disciplines, and rapidly prototyping solutions. Wearer of many hats. Passionate about all things multiplayer.

### **EXPERIENCE**

## Network Gameplay Programmer | Sky Castle Studios LLC

May 2023 — May 2024

- Developed gameplay and networking focused systems on an unannounced project.
- Prototyped network features specialized around websockets and a tcp-based solution.
- Prototyped gameplay features for the project, including network game state rewinding and fast-forwarding, local storage of network game state for mid-game reloading, as well as various UI elements.
- Collected network throughput statistics and improved network serialization strategies used by the project.
- Implemented hot-reloading and developed a custom Continuous Deployment pipeline for internal testing of multiple projects.
- Maintained docker images and managed linux-based deployment of current projects and internal microservices.

Tools Used: C/C++, JavaScript, TypeScript, Node.js, Nginx, Git

## Network Programmer | ACDMY

February 2020 — January 2021, August 2022 — November 2022

- Prototyped and implemented gameplay and multiplayer subsystems for the Synthetic Selection project.
- Rigged animation skeletal structures for creatures in produced cinematics.
- Developed a continuous integration pipeline for the company, and developed other internally-used tools and solutions that tremendously increased productivity.
- Built a RESTful API focused on maintaining user generated content.
- Created a node editor tool for users and developers, purposed around visual scripting and content creation.
- Helped create the Procedural Animation and Inverse Kinematics Systems foundational to the project.
- Developed the ACDMY discord bot still used by the discord community.

Tools Used: Unity3D, C# .Net, C/C++, Houdini, AWS Platform Tools, FastAPI, LiteNetLib, MySQL, PostgreSQL, Jenkins, Git

#### Developer | Babaroga

November 2017 — March 2019

- Acted as a client-focused programmer, assisting 3rd-party AA and AAA studios with development.
- Ported VR game projects between platforms such as Oculus, Viveport, Windows Mixed Reality, Samsung VR, Cardboard, and others.
- Developed and maintained various game titles using Unity, Unreal, and an in-house engine framework.
- Helped optimize and maintain continuous deployment of projects, and built a Subversion-to-Steam pipeline to build with a single click.
- Created an R&D solution for shareholders focused on cloud-rendering 360-video to distribute from a remote unity application to a mobile device.

Tools Used: C# .Net, C/C++, Java, PHP, Unity3D, Unreal Engine, Android NDK, Oculus SDK, Viveport SDK, AWS Platform Tools, MySQL, Jenkins, SVN, Git, Perforce

# Network Programmer | MasonDogg Studios

May 2016 — January 2018

- Worked as a contract consultant, focusing on multiplayer and network systems.
- Assisted with implementation of gameplay features across multiple project titles.
- Mentored hired interns regarding programming best practices and development workflow.
- Helped improve company-wide meeting efficiency by developing a new structure.

Tools Used: Unity3D, C# .Net, C/C++, JavaScript, Git

### Instructor | iD Tech Camps

May 2013 — August 2013

- Taught attending campers to develop and create their own projects in a hands-on environment using GameSalad, Unity3D, Obsidian(Engine), Java, C++, RPG Maker VX Ace, and iOS.
- Helped develop a local curriculum and amended existing curriculum to better suit camper situations.
- Attended to campers as a counselor, handled medical needs and day-to-day time structure for activities.

Tools Used: Unity3D, C# .Net, Java, C/C++, GameSalad, Objective C

# **EDUCATION AND CERTIFICATION**

# **DePaul University**

2012-2016

B.S. Computer Game Development, conc. Systems Programming

Diversity, Equity, & Inclusion in the Workplace V4.1

(Traliant, July 2023)