

BRIAN HERMAN

Gameplay / Network Programmer

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SKILLS

- **Programming:** C/C++, C#, Java, JavaScript, TypeScript, Lua
- **Engines / Frameworks:** Unity3D, Unreal 4/5, LiteNetLib, .NET Core, Oculus SDK, Viveport SDK
- **Web Development:** Node.js, Nginx
- **Databases:** MySQL, PostgreSQL
- **Version Control:** Git, SVN, Perforce
- **Tools:** Houdini, Maya, Jenkins, AWS Platform Tools

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 a websocket-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 used in social media 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 service with the purpose of maintaining user generated content.
- Created a node editor tool for users and developers, purposed around visual scripting and content creation.
- Implemented 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)