

Skills

Languages

C++ (Proficient)
Python (Proficient)
C# (Proficient)
Blueprint (Proficient)
PHP (Familiar)

Technologies

Unreal Engine
Perforce
Git
Jenkins
Wwise

Platforms

Windows (Proficient)
Xbox (Proficient)
UWP (Proficient)
Linux (Familiar)
WebAssembly (Familiar)

Additional

Tools Programming
Build Automation
Gameplay Programming
Multiplatform Development
Agile Development

Professional Experience

Software Engineer (contract) - Highwire Games

5/2020 – CURRENT

Worked on Six Days in Fallujah, a co-op First-Person Shooter made in Unreal Engine 4 featuring procedurally generated levels.

- Utilized the Game Multimedia Engine (GME) integration for Wwise to create both a radio voice chat and positional voice chat system, allowing the audio team to easily mix voice audio with the rest of the audio in the game.
- Setup UnrealGameSync with prebuilt binaries allowing the team to easily stay in sync with code changes when syncing new assets, ensuring we did not end up with mismatching engine versions on updated assets.
- Supported dynamic generation of spatial audio data in the UE4 /Wwise Integration, allowing it to work in generated levels.
- Maintained the project UE4/Wwise integration, keeping it up to date alongside engine upgrades.

Tools Engineer (contract) - Probably Monsters

7/2019 – 5/2020

Worked on a currently unannounced title made in Unreal Engine 4

- Collaborated with the design team to design and implement a system to import game data from excel spreadsheets to ease balancing lots of gameplay values, reduce developers getting blocked by checked out assets, and shrink the size of updates.
- Created a plugin for the Reaper Digital Audio Workstation to export the timing between audio files in a session as well as generate placeholder TTS dialog where recorded dialog was not available.
- Streamlined the process of adding, and organizing dialog in Wwise, allowing new dialog to rapidly go from being recorded to tested in game.

Build Engineer (contract) - Xbox Global Publishing Group

2/2019 – 7/2019

Worked on Crackdown 3, a AAA 3D action game published by Microsoft Studios featuring co-op and versus multiplayer.

- Migrated the build pipelines from two different developers onsite, upgrading and rewriting them to work on XGPG servers.
- Automated the process of building an Unreal Engine project, cooking the assets of the project, and deploying platform packages utilizing the Unreal Automation Tool, Playfab, and Jenkins Declarative Pipelines.

Software Engineer - DigiPen R&D – Zero Engine Team

(INTERN) 3/2016 – 1/2018
(FULL-TIME) 1/2018 – 9/2018

Zero Engine is an open source, component-based, 3D game engine with every major system written in-house. (zeroengine.io)

- Ported the Zero Engine over from a Visual Studio project to a CMake project, enabling cross-platform development.
- Automated taking documentation from Doxygen and generating editor tooltips with it, removing all manual documentation upkeep and making it a part of the build process.
- Co-Created a presentation/tutorial using the knowledge from porting the Zero Engine project to teach students and CMake beginners how to get started using best practices. (github.com/playmer/CMakePresentation)

Education

Bachelor of Science in Computer Science

GRADUATED 12/2017

DigiPen Institute of Technology