Joshua Shlemmer
Software Engineer

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Experienced in Build Systems, Continuous Integration/Deployment, and Game Engine Development

Skills

Languages	Technologies	Platforms	Additional
C++ (Proficient)	Unreal Engine	Windows (Proficient)	Game Engine Dev
Python (Proficient)	Perforce	Xbox (Proficient)	Tools Programming
C# (Proficient)	Git	UWP (Proficient)	Build Automation
XML (Proficient)	Jenkins	Linux (Familiar)	Multiplatform Development
PHP (Familiar)	CMake	WebAssembly (Familiar)	Agile Development

Professional Experience

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, updating, 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.
- Upgraded old pipelines to Jenkins Declarative Pipelines to allow for easier continued updates, maintenance, and archival.
- 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.
- Communicated with the Test team to track regressions and bugs in the build system to better understand their root causes.

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.
- 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)
- Extended the core engine's documentation system to export template information, allowing for better type information in the code ref and in editor tooltips to improve type discoverability for users.
- Added support in the team's Buildbot configuration for testing WebAssembly and Linux builds, learning the build pipeline for both platforms in the process.

Education

Bachelor of Science in Computer Science
12/2017

DigiPen Institute of Technology

Interesting Projects
- Implemented a Goal-Oriented Action Planning (GOAP) system in C++ for a game project to allow for emergent behavior with simple components. (github.com/Yellowrobe/GOAP-Implementation)
- Created a modular steering behavior system for easy movement behavior generation in a 3D game project.
- Wrote the core of a game engine in C++, utilizing a component-based design to make the engine easy to expand.