Joshua Shlemmer

Software Engineer

Experienced in Build Systems and Game Engine Development

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Skills

Languages	Technologies	Platforms	Additional
C++ (Proficient)	CMake	Windows (Proficient)	Game Engine Dev
C (Proficient)	Buildbot	Linux (Familiar)	Tools Programming
Python (Proficient)	Git	WebAssembly (Familiar)	Build Automation
JavaScript (Familiar)	Phabricator		Game AI Programming
PHP (Familiar)	Visual Studio		Multiplatform Development

Experience

JANUARY 2018 – SEPTEMBER 2018

Software Engineer @ DigiPen R&D – Zero Engine Team (zeroengine.io)

- Ported the Zero Engine over from a Visual Studio project to a CMake project, allowing for 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)
- Wrote a CMake utility that allowed for adding new external libraries with minimal script changes to reduce the need to make unnecessary CMake changes.
- Developed a Phabricator markdown exporter in C++ for the doc tool, reducing the doc upload process to running a script.
- Extended the core engine's documentation system to export template information from bound templated engine types to allow for proper type information for templates in the code ref and in tooltips to improve type discoverability for users.
- Maintained our Buildbot written in Python to begin to support testing more platforms, learning how to create builds for WebAssembly and Linux in the process.

MARCH 2016 – JANUARY 2018

Intern @ DigiPen R&D – Zero Engine Team (zeroengine.io)

- Extended Buildbot by writing custom steps in Python to allow for automated tests on more development branches so bugs could be caught before ever being merged into a release build.
- Constructed doc tool in C++ to parse Doxygen output and combine it with Zero Engine output to increase accuracy of both the code ref online as well as the tooltips displayed in the engine's editor.
- Introduced macro expansion support features to the C++ doc tool to document properties that were defined and/or commented in macros, greatly reducing the number of bound properties missing documentation.

JUNE 2014 – AUGUST 2014 AND JUNE 2015 – AUGUST 2015

Lead Activities Coordinator @ DigiPen ProjectFUN

- Coordinated the design of a tabletop RPG, creating a fun opportunity to foster positive interactions between students.
- Managed a team of four coordinators to lead all High School activities after classes.

Education

GRADUATED DECEMBER 2017

Bachelor of Science in Computer Science

DigiPen Institute of Technology

Interesting Projects

- Implemented a Goal-Oriented Action Planning (GOAP) system in C++ for a Sophomore game project to allow for emergent behavior with simple components. (github.com/Yellowrobe/GOAP-Implementation)
- Designed an Entity/Component system to assist code reuse in my sophomore project.