

Holden Profit

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Summary of Skills

- Knowledgeable of C/C++, C#, and JavaScript
- Extensive knowledge of Git

Academic Projects

Graphics Developer and Technical Director, *Light Year*

Oct. – Current 2019

- Implemented soft shadows utilizing Moment Shadow Maps
- Co-designed and authored the engine's post processing system that allowed for unique post processing chains for different cameras
- Added BRDF lighting model and deferred shading to the existing engine
- Co-designed and implemented UI system
- Created the engine's material system allowing for faster iteration times on asset creation
- Developed the engine's prefab editor which automated the editing JSON file by hand process and made assignment of materials to various game objects more simple and intuitive

Graphics Developer and Technical Director, *Infection*

Sept. – Oct. 2018

- Created deferred rendering engine using DirectX 11
- Constructed the architecture for using Entity Component System within the engine
- Designed and implemented multi-threaded job-based architecture for engine

Graphics Developer, *Eggnapped!*

Jan. – May 2018

- Renovated hardware accelerated rendering system in C++ from *Bug Blaster* for faster and more efficient rendering, a cleaner API, and easier to use and understand features
- Created a particle rendering system using OpenGL instance rendering
- Built the dynamic lighting system for the game supporting numerous point lights using forward rendering
- Utilized FBOs and texture painting to render a minimap that was revealed as the player progressed
- Developed the game's pseudo-random level generator utilizing a grid system and A* to connect selected room nodes within the grid

Sole Developer, *Bug Blaster*

Sept. – Dec. 2017

- Designed and implemented hardware accelerated rendering in C++ using OpenGL
- Crafted a physics engine and JSON parsing API all within C++
- Constructed an Event-Subscription system in C++ that made the engine more modular

Professional Experience

Intern Developer, *Run Games*

Jan. – Current 2019

- Worked within Unreal Engine 4's Blue Print system and native C++ to develop new game play features and fix bugs for an online multiplayer game

Senior Web Developer and Consultant, *Information Control Company (ICC)*

2013 – 2017

- Interviewed potential new hires through 1-on-1 video calls and collaborative internet editing systems to determine their technical skill level
- Consulted with ICC clients to build various websites and applications according to the client's needs

Senior Web Developer, *OCLC (ICC Contractor)*

2017

- Enhanced and maintained library cataloging system using ES5 JavaScript

Web Developer, *McGraw-Hill Education (ICC Contractor)*

2014 – 2017

- Developed a reporting app using Angular 1.x and Angular-Material to help teachers track student progress
- Planned and re-wrote an existing Flash application in ES5 JavaScript and Angular 1.x
- Taught 5 coworkers how to use Git using a presentation and 1-on-1 mentoring

Web Developer, *Sterling Jewelers (ICC Contractor)*

2013 – 2014

- Developed a jewelry sketching app for Android tablets using ES5 JavaScript

Education

Master of Science in Computer Science, *DigiPen Institute of Technology*

Expected Grad: August 2019

Bachelor of Science in Computer Science, *Shawnee State University*

2013

- Focus: Digital Simulation and Gaming Engineering Technology