|  |  |  |  |
| --- | --- | --- | --- |
| Skills | | | |
| **Languages & APIs:** | C++, C, Java, C#, Scaleform, Actionscript, OpenGL/GLSL, Unrealscript, Python, Lua | | |
| **Engines:** | CryEngine, Unreal Engine, Unity | | |
| **Platforms:** | Windows, Linux & Android | | |
| Work Experience | | | |
| **Software Engineer at Oculus VR** | | Dallas TX, Aug 2014 – Present | |
| * Working on really cool stuff. | | | |
| **Associate Programmer at Crytek USA** | | | Austin TX, Jan 2014 – Jul 2014 |
| * Working on *HUNT: Horrors of the Gilded Age* and contributed to the following: options menu, character customization menu, hit indicator system, friend list, global inventory, resource management system, and matchmaking lobby system. * Worked within the following areas: UI, Online Services, Resource Management, Animation, and Multiplayer Gameplay. | | | |
| **Programmer Intern at Gearbox Software** | | Plano TX, Jun – Aug, 2013 | |
| * Collaborated with design team on a project developing code in the following areas: editor, game, replication, state driven agent and animation. * Worked with core technology division, developing code for a set of tools to extract patch information from source files and query a SQL database in addition to bug fixing. | | | |

|  |  |
| --- | --- |
| Team Game Projects | |
| Kraven Manor [Steam Greenlit], UDK, 12 Developers, 9 Months | Escape The Claw, UDK, 6 Developers, 4 Months |
| *Programmer* | *Lead Programmer* |
| * Helped integrate Steamworks. * Implemented Artificial Intelligence systems. * Implemented core shifting room mechanic. * Implemented interactive & possessed objects. * Implemented tools for designers. | * Specified and documented game systems. * Implemented user controlled claw machine. * Implemented replication - picks up other players. * Delegated tasks and fixed bugs. * Maintained Technical Design Document. |
| Nerd Rage, Torque X, 4 Developers, 3 Months | Dragon Wreck, Android NDK, 2 Developers, 1 Month |
| *Programmer* | *Programmer* |
| * Participated in game design meetings. * Implemented color matching mechanic. * Implemented tool for level designer to spawn waves of enemies. * Maintained Technical Design Document. | * Implemented core game engine. * Conformed to Android app guides. * Implemented GUI for touch interface. * Implemented Open AL sound system. |

|  |  |
| --- | --- |
| Game & Technology Projects | |
| WELD – Thesis game project featuring a parallel genetic algorithm used for AI |  |
| * Thesis examines the benefits of machine learning in game development by implementing an AI that uses a parallel genetic algorithm for unit selection in a strategy game featuring customizable robots. * Implemented a fast 2D engine from scratch featuring optimized core components enabling multiple games simulated per second in parallel. | |
| VANGUARDS – Tank Demo featuring terrain and concurrent renderer |  |
| * Used my skeletal animation tools along with a classmate’s art asset to implement a fully controllable tank. * Implemented height map based terrain and a ray cast vehicle model to drive the tank on the terrain surface. * Implemented concurrent OpenGL renderer | |

|  |  |
| --- | --- |
| Education | |
| The Guildhall at Southern Methodist University Master of Interactive Technology, Software Development  Awarded *Cohort 18 SD Honors for Organic AI using Genetic Algorithms* | December 2013 |
| University of Minnesota Bachelor of Science, Computer Science | December 2011 |