Ian Backlund Video Game Programming and Design

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Computer Skills

Programming Skills

Skilled at using the C# and C++ programming languages to implement videogame rules and gameplay using Rider, Visual Studio, Android Studio, Mono, and XCode as development environments. Able to write code using common design patterns (Object-Oriented, Component based, Entity Component Systems, Dependency Injection). Experienced at using the Unity, Torque and Lithtech Jupiter engines for game development. Skilled at creating scripts, plug-ins and exporters for 3D Studio Max and Blender. Familiar with synchronizing code in a cooperative development environment using Source Depot, SVN, Git and Visual Source Safe.

3D Computer Graphic Skills

Experienced with a wide range of computer graphics programs including but not limited to Blender, 3D Studio Max, Allegorithmic's Substance tools, Photoshop and GIMP.

Projects and Experience

Endeavor One: Senior Programmer

4/2020 to Present

Worked as a Game Programmer on three different released Virtual Reality game titles and numerous prototypes. Primarily responsible for Al logic, pathfinding, perception systems, game rules, animation and art integration. Experienced with Virtual Reality and Mixed Reality SDK's for the Meta Oculus, Playstation VR and Steam (PC).

Batman: Arkham Shadow:

Supporting the primary studio Camouflaj - Worked on Al systems, Player Feedback Events, Ambient Dialogue and Object Pooling.

IronMan VR on the Meta Quest:

Supporting the primary studio Camouflaj - Prototyped and built out a system to convert the previously point-to-point teleport movement system into a free-roaming movement system.

Arashi: Castles of Sin:

Responsible for AI, physics programming and code optimizations on the original Playstation VR release. Developed tooling for NavMesh generation. Built out the logic for a detailed AI wolf companion: Haru, including fetch, distract, follow and petting features. Assisted external studios with ports to the Oculus and PC.

Kuma TV Games: Programmer

8/2013 to 4/2020

Worked as a programmer and designer on three different released games and many more game prototypes. Programmed gameplay, networking, AI opponents, graphics, GUI, in-app purchasing, voice controls, and analytics using the Unity game engine and C#. Released games on the Steam (PC), iOS, Apple TV, Fire TV, NVIDIA Shield and android platforms (Google Play).

Space Epic: Promo Video

Evil Magic Finger Infinite Overdrive

AIS: Programmer/Artist

6/2011 to 3/2013

Programmed numerous new features and bug fixes for the PriSim virtual shooting range. Primarily responsible for changes to the TSE and T3D game engine. These duties included C++ and torqueScript programming. Additionally, responsible for creating and editing new 3D art assets using 3DStudio Max.

PriSim Video Demo

Armageddon Road: Lead Designer/Programmer/Artist 6/2007 to 4/2011

Developed game-rules, game-play, character models, and character animation (including facial lip syncing). Developed AI, Ranged and Melee Combat systems, save game system, inventory system and many other programming and debugging tasks. Updated game project through several iterations of the Torque engine. <u>Armageddon Road Video Demo</u>

Multi-Touch Game: Programming and Documentation 7/2008 to 7/2009

Developed a Windows 7 multi-touch "Cog-Stacking" game example on an HP Touchsmart computer. Responsibilities included designing a small DirectX 9 rendering engine and then porting that engine to DirectX 10. C++ engine code included a basic GUI, model loading, sound effects, music and gameplay. Additional job duties included standard conceptual and reference documentation writing. *Video Demo*

Microsoft DirectX: Documentation

5/2003 to 6/2007

Worked numerous, year-long code documentation contracts with Microsoft. Wrote documentation that helped developers adopt DirectX rendering technologies. Responsibilities included API reference documentation, feature overviews and the development of complete code examples in C# and C++.

BYFCorp: Lead Designer/Programmer

1/2004 to 8/2004

Designed and built a PC game demo. Primary duties included writing game specific C++ code on top of the Lithtech Jupiter engine (a DirectX 9 game engine).

Education

Post-Graduate Applied Information Technology Certificate, Information Technology Institute, Denver Colorado. October 2000.

BA in English and Communication, Lewis & Clark College, Portland Oregon. December 1998.