

Keaton VanAuken

Skills and Qualifications

- C/C++/C#
- DirectX, XNA, OpenGL
- Unreal Script
- Action Script (Macromedia Flash)
- Hero Script
- PHP, JavaScript, XHTML, CSS
- Tortoise SVN and Perforce Source Control
- Unreal 3
- Half-Life Source
- Hero Engine
- Unity 3D
- Doom 3
- Torque
- Extensive knowledge of object oriented game engine programming including gameplay, graphics, AI, audio, input, and shader programming
- Cross-platform graphics experience for both Windows and Unix-based operating systems
- Experience using 3D Studio Max, Illustrator, Photoshop, Z-Brush, and Endorphin helps me to understand the art pipeline to ease communication and solve problems while keeping art in mind

Experience

Dates	Project
Dec 2007 - Present	<i>Unannounced Title</i> - Superstition Studios – Cheyenne Mountain Entertainment Programmer <ul style="list-style-type: none">• Implemented an MMO prototype with a skeleton crew in four months<ul style="list-style-type: none">○ Character movement○ Player stats○ Graphical User Interface○ Player versus Player combat system○ Powers• Collaborated with animator in Hero Engine to implement animation subsystems<ul style="list-style-type: none">○ Animation blending○ Real-time animation morphing○ Character aim offsets• Developed monster and NPC AI in both Unreal 3 and Hero<ul style="list-style-type: none">○ Path finding○ Spatial awareness○ Player interaction○ Attack powers• Worked with designers to build multiple MMO-scale subsystems in Hero Engine<ul style="list-style-type: none">○ Powers System - Expedites creation of complex, scalable powers for players and NPCs○ Effects System – Allows designers to create complex effects like buffs, debuffs, and damage over time without scripting• Implemented a dynamic third person camera system<ul style="list-style-type: none">○ Camera position changes to offer more visibility in fast-paced environments

- Built multiple Kismet objects for designers in Unreal 3
 - Facilitates AI control
 - Manipulation of player stats
 - Implementation of level-based quests
- Created targeting system using narrow, cone-based hit detection
 - Focuses on non-twitch gameplay
- Managed the code merges between different departments using Perforce
- Improved the build pipeline with custom made script files to automate processes
 - Automated installer creation
 - Build and submit reference shader caches into Perforce

May – Sep 2007 *eInspections* - Aztec Software Solutions
Application Programmer Internship

- Created a C++ authentication program library used by a C# front-end application

May 2006 – Dec 2007 Kexan Engine – 2D/3D Game Engine
Solo project

- DirectX and OpenGL based, including cross platform compatibility
- Functional audio, input, math, physics, and AI classes/libraries
- Version of the engine using Microsoft's XNA game library is also available

May 2005 - Aug 2006 *Dodgeball Source* – Half-Life 2 Modification - www.dodgeballsource.com
Programmer

- Nominated for Best Half-Life 2 Modification by IGF at GDC 2006
- Gameplay programming using Valve's Source game engine

Jan – Dec 2005 *Subterfuge* – Half-Life 2 Modification
Programmer

- Unique comical gameplay outside of standard FPS shooters
- Gameplay programming using Valve's Source game engine

Education

Sep 2003 – Dec 2007 University of Advancing Technology
Bachelor's of Software Engineering, Focus: Game Programming

- Specializations included
 - Game Design
 - Gameplay programming
 - Graphics programming