Joshua H. Carr

Environment Artist & Programmer

I am an artist and programmer with a passion for video games and 3d entertainment. I am dedicated to bringing creative ideas to life and enjoy doing so even under pressure. I also have a deep understanding of both the artistic and technical sides of modern graphics pipelines.

Technical Skills: Low and high polygon modeling, UV mapping, environment and level design, gameplay interactions, particle effects, graphics programming.

Programming Languages: C, C++, C#, HLSL, XML, HTML, ActionScript, UnrealScript

Software: Maya, Mudbox, CrazyBump, Photoshop, Flash, Dreamweaver, Illustrator, After Effects, Unreal, Torque, Visual Studio, Microsoft Office

Education

Bachelor of Science: Digital Media (Spring 2011)

East Tennessee State University, Johnson City, Tennessee

Relevant Courses:

- 3d Model Design
- Game Production
- Interaction for Level Design
- Raster-based Imaging
- Introduction to C++ I & II
- Data Structures

Projects

Remnant Project (Summer 2010)

- Environment Artist
- Modeled and UV mapped assets for the game's environment

PC Game Engine Development (2007 – present)

- Developed a deferred lighting and shading pipeline that targets Direct3D 10.0 hardware
- Designed an engine to use cutting edge rendering techniques, such as:
 - Deferred shading and lighting
 - High dynamic range image-based lighting
 - Screen-space ambient occlusion
 - Fluid particles
- Integrated NVIDIA PhysX SDK
- Programmed an intelligent content pipeline that uses XML serialization
- Implemented scene management systems
 - o Quad-tree
 - o Oct-tree
 - o AABB-tree