

WILLIAM ROSAS, JR.

Game Programmer

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OBJECTIVE

To improve my skills a generalist game programmer by working on fun, intuitive games.

EDUCATION

DigiPen Institute of Technology Bachelor of Science Real-Time Interactive Simulation – Redmond, WA
Computer Science degree emphasizing game programming, graduate April 2008

DeVry University Bachelor of Science in Computer Information Systems – Tinley Park, IL
Computer Science degree emphasizing business applications, graduated with highest honors June 2004

SKILLS

Technical

Programming Languages: C / C++ / C#, HLSL / GLSL, Lua, HTML, CSS, Visual Basic, Assembly

APIs: DirectX, XNA with XACT, OpenGL, FMOD

Tools: Visual Studio .NET & 2005, 3DS Max 9.0, Microsoft Office, Tortoise SVN, Valve's Hammer Editor

Problems Solved:

3D Graphics	2D Graphics	Phong Lighting
Skinned Model Animation	Sprite Animation	Collision Detection and Response
Environment Mapping	Render to Texture	Path Following
Multiplayer LAN Game	Interpolation	Bump Mapping
BSP Trees Particle Systems	Texture Mapping	Scene Transitions
Menu Programming	Game Logic	Data Management
Inverse Kinematics	Parallax Occlusion Mapping	Ray Casting

Math: Calculus, Vector Operations, Matrix Operations, Quaternions, Geometry, Trigonometry, Splines

Professional

Experience with team meetings and working with others, presented to large audiences, worked with clients in person and over the phone, wrote and maintained game design documents, technical design documents, timelines, milestones, weekly production reports

SCHOOL PROJECTS

Senior Project – Aether (DigiPen) Programmer / Producer Team of 2 05/07 to 04/08

3D Top-Down Shooter, Windows Vista / XP, C#, XNA Framework, DirectX 9.0

- *Implemented a particle engine to quickly make robust and visually aesthetic bullet patterns
- *Built cinematic camera using splines to zoom in and around characters during special moments
- *Created billboarded sprites that support animation
- *Calculated collisions between player, boss, and projectiles using sphere-sphere collision tests

Junior Project - Ninja vs. Ninja (DigiPen) Programmer / Producer Team of 4 09/06 to 04/07

3D Third-Person Shooter, Ninja Setting, Windows XP, C++, DirectX 9.0, Lua

- *Designed and coded a 3D graphics engine using Direct3D
- *Coded an .x file loader for static and animated 3D models exported to .x format from 3DS Max
- *Implemented a 3rd person camera that followed the player
- *Wrote a particle system using billboarded primitives

Senior Project (DeVry University) Programmer / Producer Team of 4 03/04 – 06/04

Application for a medical equipment repair company, Windows XP, Visual Basic, Microsoft Access

- *Coded a VB front end with a Microsoft Access database back end
- *Worked with a real-world client to solve their problem with a business application

Note: This application is still being used by the company today