

JaeHyuk Kwak

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WORK EXPERIENCE

THQ San Diego, CA, USA (Jun 2010 – Current) - Sr. Rendering Programmer

- Optimize UnrealEngine3 rendering performance for WWE wrestling game, **AllStars**, on Xbox360/PS3 achieving 60FPS.
- Shadow optimization with early stencil cull and PS3 EDGE library.
- Micro-code level shader optimization: bloom post-effect and Gamma correction.

Papaya Studio, Irvine, CA, USA (Nov 2009 – May 2010) – Software Engineer

- Port in-house game engine onto PlayStation3.
- Develop Normal-map, Skinning, facet-shadow and post-effect Shaders on Xbox360/PS3.
- Optimize memory and performance for **Cars** on Wii and **Ben10UA** on Xbox360/PS3.
- Develop multi-platform unit testing frameworks and automate nightly backup/build.

NC Soft Corp., Seoul, Korea (Jan 2005 - Feb 2006) – Software Engineer

- Develop a 3D online Action RPG PC game client, **AximumSaga**, using **GameBryo**.
- Develop international language displaying system in **SmashStar** serviced at PlayNC.co.kr.
- Design/implement a reusable game UI engine/tools with XML, GameBryo and MFC.

FID Corp., Seoul, Korea (March 2002 – Aug 2003) – Software Engineer

- Develop a 3D online PC game client, **IndreamWorld**, serviced at HanGame.com.

Mari Telecom Corp., Seoul, Korea (Jan 2000 - Nov 2001) – Software Engineer

- Administrate 80 servers of web-based MMO, **ArchMage** and **ArchSpace**, on FreeBSD.
- Develop a remote server monitoring system and an automatic recovering system.

SKILL

Programming	C++ (10 years) , Java, Ruby, Perl, Shell script
Game Console	PS3, Xbox360, PS2, Wii
Graphics API	HLSL, GLSL, OpenGL, Direct3D 9, XNA, JOGL
Game Engine	Unreal3, PhysX, GameBryo, Wild Magic
Team Integration	Perforce, AlienBrain, CVS, SVN, Make/Ant, Collada, Unit testing
Operating System	Linux, FreeBSD, MS-Windows XP/2000/NT, SUN-Solaris, Mac
Database	MySQL, JDBC, Hyper Sonic
Libraries	C++ (STL, Boost, MFC, OpenAL, TR1, Loki), Java (Swing, EclipsePDE)
Web Programming	SpringFramework, EJB, PHP, JavaScript, AJAX, Dojo
Spoken Language	Korean, English, Japanese
Etc	Pix, GPad, UML, UseCase, 3DS-Max, Maya, PhotoShop, RenderMonkey

EDUCATION

George Mason University, VA, USA (Aug 2007 – May 2009)	GPA : 3.83/4.0
Master of Science in Software Engineering	
Korea University, Seoul, Korea (Mar 1997 – Feb 2005)	Major GPA : 3.80/4.5
Bachelor of Science in Computer Science Education	GPA : 3.41/4.5

ADDITIONAL

Distinguished Academic Achievement from Computer Science Department in GMU, VA (2009)
Graduate Teaching Assistant for Advanced OOP class in George Mason Univ., VA (2008 – 2009)
President of Student Association, Computer Science Education at Korea Univ. (1999)