

Apollo Isaac Orion Ellis
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<http://www.cs.utexas.edu/~apichit>

Education

University of Texas at Austin Major: Computer Science	Graduated with M.S.C.S May 2011 Emphasis: Computer Graphics and Parallel Systems
University of California at Berkeley Major: Computer Science	Graduated B.A. May 2008

Relevant Coursework

UC Berkeley: Computer Graphics Operating Systems and System Programming User Interface Programming Languages and Compilers	Software Engineering Independent Study (Graphics Research) Communication Networks Efficient Algorithms and Intractable Problems
UT Austin: Graduate Computer Graphics Formal Semantics and Verification Parallel Systems Computer Graphics Pipeline	Advanced Image Synthesis Multi-core Programming Distributed Computing Multi-core Computing

Software Engineering Experience

June 2011 - Present Company: Intel Corporation: Folsom, CA
Title: Component Design Engineer Supervisor: John T. Duong
Group: 3D Graphics System Validation
Duties: Test and Debug next gen GPUs
Projects: Broadwell GPU Memory Interface Pre-silicon Haswell GPU Rendering Post-Silicon

Summer 2010 Company: Sony Computer Entertainment America: Foster City, CA
Title: Research Intern Supervisor: Richard Marks
Duties: Experiment in game play mechanics and implement demos for the Move Motion Controller
Projects: Playstation Move: Particle Demo, Terrain Demo

Summer 2008 Company: Sony Computer Entertainment America: Foster City, CA
Title: Developer Intern Supervisor: Tat Iwamoto
Duties: Cgc Compiler debugging and extension development - Project Design and Testing
Projects: Capturing Compiler extension for compilation replay, Compiler Debug

Awards/Honors

First place: Parser optimization competition UC Berkeley Spring 2007
Intel Undergraduate Research Program Funding 2007
Vodafone US Foundation "Undergraduate Fellowship" 2007
Research Experiences for Undergraduates (REU) Funding 2008
First place: Ray Tracing optimization competition UT Austin Fall 2008

Programming Skills

Visual Studio, C++, C, OpenGL, Shaders, Assembly, Multi-core
Object Oriented, SIMD / SSE, Profilers
Java, Python, Ruby, Linux Shell

Projects

PS3Doom: FPS based on Doom I. Implemented on the Playstation 3
PS3RT: Ray Tracing Engine for the PS3
CORE: C++ OpenGL Rendering Engine: Collada Model Loader, Terrain Gen Engine, and GL Shader Pipeline
Jack Rabbit: A PS3 Cell BE run time system with adaptive multi-grain parallelism, and automatic multi-buffering.
Project Demos are available at <http://www.cs.utexas.edu/~apichit/Projects.html>

Publications

"Multi-core Real Time Ray Tracing Acceleration" California Engineer. Featured Article, Spring 2008.
"Jack Rabbit : An Effecitve Cell BE Programming System for High Performance Parallelism" TDL, Spring 2011