

# Jason Pecho

www.jasonpecho.com

628 W. Surf St Apt 1A  
Chicago, IL 60657

(708) 819 – 0000  
jason.pecho@gmail.com

## Education

**DePaul University**, Chicago, IL

Master of Science in Computer Games Development, June 2010

- Emphasis in large-scale, real-time systems

Current GPA: 4.0/4.0

**DePaul University**, Chicago, IL

Bachelor of Science, *Summa Cum Laude* (2008)

Major: Computer Games Development,

Cumulative GPA: 3.947/4.0

## Development Experience

**Devil's Tuning Fork**, *Project Lead & Technology Lead*

June 2009 – Present

Devil's Tuning Fork is a student game project created for the Independent Games Festival Student Showcase. It was named one of the 10 IGF Student Showcase winners in 2010. Devil's Tuning Fork is also being featured in Matadero Madrid, a Spanish Art Museum, for six months.

- Cooperated with team members to make sure they had the means to get their tasks completed
- Collaborated with advisors and the producer to form milestone and business plans
- Worked with discipline leads to make sure tasks were clear, assigned, and completed
- Appointed technology tasks to technology group members
- Headed localization effort for Spanish build
- Developed a level editing tool for use in Maya using Python and the Maya API
- Augmented my problem solving skills through gameplay, systems, and pipeline coding as well as debugging and error correction

**Game Engine Architecture & Design**

January 2010 – Present

Game Engine Architecture and Design is a two-quarter class where we design and write our own game engine from scratch.

- Developed SIMD-capable math engine
- Designed and implemented a multi-heap memory system
- Invented a flexible archival scheme for loading and storing game data
- Created an OpenGL based graphics engine
- Wrote an FBX converter for use with my engine's file format
- Began the necessary steps for an animation engine

**DePaul Capstone Project**, *Lead Programmer*

January – June 2008

My capstone project was titled Celestial Clash. This was the first large-scale game project that I had worked on. The team was made up of three programmers, an artist, and a producer and development lasted six months.

- Developed team communication skills and realized the importance of said skills
- Learned the importance of good coding practices
- Experienced hard deadlines and mock publisher interactions
- Used a version control system to iterate the code base

**Game Performance Optimization**

March – June 2009

This course taught optimization through better understanding of C++ along with comprehension of how hardware works. The final project was to optimize a particle system.

- Decreased particle system loop speed by 300%
- Studied and implemented data alignment, return value optimization and flagging implicit conversions as errors
- Explored C++ performance techniques such as proxy objects and hot/cold data structures

## Tools Programming

February – March 2009

The goal of this class was to create a tool set and file format for use in the DePaul Game Development program.

- Coordinated between multiple groups working on different aspects of the tool
- Converted the tool to use OpenGL's vertex buffers and wrote polygon triangulation code
- Parsed the FBX, TGA, and BMP file formats and converted them to a single proprietary format

## Work Experience

**DePaul University, Lecturer**

Chicago, IL

September 2008 – June 2010

- Taught six separate college-level courses titled "Introduction to Game Design" over six quarters
- Taught three separate college-level courses titled "Game Development I" over three quarters
- Bettered time-management skills in balancing lecturing with another job and being a full-time graduate student
- Learned to convey important information in a more understandable way
- Walked students through solving their games' logic problems in the Gamemaker engine

**Direct Trading Group, Tech Support**

Chicago, IL

December 2006 – February 2009

- Developed exceptional teamwork skills through interacting with coworkers who had a hard time communicating what exactly they needed done to their computers
- Honed problem solving skills in the development of a software application to expedite week-end tasks for the company
- Managed both e-mail anti-spam solution and e-mail account administration
- Maintained all computers and software for the company and diagnosed all problems with computers

## Technical Skills

**Languages:** C++, C#, Objective-C 2.0, OpenGL, GLSL, Python, PHP, Actionscript, Visual Basic, Unix

**OS:** Microsoft Windows, DOS, Macintosh OS X Snow Leopard

**SDKs/Engines:** Microsoft XNA, QE, Game Maker, iPhone SDK 3.0, Autodesk FBX

**Applications:** Adobe Photoshop, Autodesk Maya 3D, Microsoft Visio

**IDE:** Microsoft Visual Studio, xCode,

**Version Control:** Perforce, SVN, CVS

## Activities & Awards

Game Jam Chicago-DePaul first place game for *The Malicious Masque*

2010

Dean's List

2004 - Present

St. Vincent DePaul Scholarship

2007 – 2008

Computer Science Scholarship

2006 – 2007

Top of the Class

2004 – 2008

DePaul Presidential Scholarship

2004 – 2008

AXA Achievement Award

2004 – 2005

DePaul Study Abroad Program, Melbourne, Australia

2006

Computer Literacy in our Community Co-Coordinator

2007 - 2009

DePaul Ambassador Executive Board Member

2005 – 2006

Service Immersion to New Orleans, LA

2008