

# Bill Davey

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## Objective

Full-time employment as a programmer at a video game development company

## Education

Rensselaer Polytechnic Institute (RPI) - Troy, New York.

- B.S. in Computer Science (with Game and Simulation Arts and Sciences dual major) expected May 2010
- GPA: 3.89 / 4.0

## Work Experience

### 1<sup>st</sup> Playable Productions

Troy, New York

Intern C++ Programmer for Nintendo DS Titles

May - August 2009

- Unannounced Nintendo DS Title:
  - Developed core state machines, in-game level editor, mini-games within levels
  - Implemented 2D & 3D UI Systems
  - Researched and developed support for new camera management and 3D animation features
  - Received *1<sup>st</sup> Playable MVP Award* for helping overloaded team members

### 1<sup>st</sup> Playable Productions

Troy, New York

Co-Op C++ Programmer for Nintendo DS Titles

January - August 2008

- Rock University Presents: The Naked Brothers Band The Video Game
  - Resolved over 300 Bugs involving 2D & 3D Graphics, Input Handling, HUD Systems
  - Created complex 2D & 3D UI Systems
- Ener-G: Gym Rockets (Ubisoft)
  - Resolved over 100 Bugs. Created complex 2D & 3D UI Systems
  - Created four mini-games involving 3D Camera manipulation, 3D Animation chaining, several drawing algorithms and several custom saving algorithms
  - Developed custom replay system and dynamic tutorial system for main game
- Shadowed by other interns to train them on the libraries and coding standards

### Rensselaer Polytechnic Institute Dept of Computer Science

Troy, New York 2007-2009

Teaching Assistant for C++ classes "Computer Science I & II" and "Beginning C Programming for Engineers"

## Technical Skills

Programming Languages	C++, Java, C, Python, HTML, some experience with C#, Assembler
Programming Environments	Microsoft Visual Studio (with Visual Assist X), Eclipse, BlueFish
Programming Libraries	Nintendo DS SDK, STL, Boost, WiiUse, Microsoft XNA, Pygame, Panda3D
Multimedia Tools	Adobe Photoshop, 3D Studio Max, Autodesk Maya, Adobe Premiere Pro, Gimp, Adobe After Effects
Version Control	Subversion (command line and with TortoiseSVN)
Graphics Programming	Nintendo DS SDK, OpenGL, 2D/3D Software Rendering, Orthogonal/Perspective Projection, Rotation/Translation Matrices, Collision Detection, Line Algorithms
General Programming	Finite-State Machines, Shortest Path Algorithms, Depth/Breadth First Search

## Projects

- 3D Skiing Game involving head tracking using infrared sensors with PyWiiUse library and WiiMote
- 3D Adventure Game compatible with XBOX 360 using XNA and C#
- 3D Maze Game in Python where the player has a flashlight to guide them through the maze and to repel enemies they will encounter along the way
- Strategy/puzzle game involving attraction and repulsion physics and complex level design in Python

## Awards

- RPI Dean's list all semesters
- Rensselaer Medal for Excellence in Math and Science
- Upsilon Pi Epsilon Computer Science Honor Society
- Montgomery High School Computer Science Award
- Xerox Creativity Award for Robotics
- National Honor Society