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## RELEVANT EXPERIENCE

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### FIEA, University of Central Florida

Aug 2009 - Present

#### Shadows of Abigail: 2.5D platform/puzzle game

- Developed region system and tools for streaming level content
- Co-developed variable tweaking tool for rapid iteration
- Improved frame rate by gathering and acting on GPU profiling data

#### Pulse: Futuristic arcade sports game

- Implemented network synchronization and client side prediction
- Game physics using PhysX; heavy character controller customization

#### Personal Programming Project: Network synchronization methods

- Implementing and analyzing several network synchronization methods
- Developed tools to simulate network latency and packet loss

#### FIEA-GE & Power Lines: Cross platform, data driven engine and game

- Implemented XML scripting language with entities, behaviors, events
- Fully deterministic gameplay with lockstep networking for multiplayer

#### Final Fantasy 6: Battle of Narshe: Cross platform partial remake of FF6

- Developed tile based map, movement, and collision systems
- Developed wrappers to facilitate platform independent code
- Implemented graphics rendering on Windows (OpenGL) and Xbox

#### Rapid Prototypes: Four two week prototypes in four different engines

- One prototype named "Best Overall Prototype" by faculty out of forty total; presented at a private showing at EA Tiburon

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### Clemson University

Aug 2007 - May 2009

#### Various game projects

- Embedded programming, working within strict memory limitations
- Implemented Wii Remote control, including motion detection

#### Compiler in C++: Compiled Lisp-like language into JVM byte code

- Developed all components to provided specifications: parser, type checker, symbol table with C-style scoping, code generator

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### Gnoso, Inc.

May - Aug 2007

#### NCover: Code coverage tool for .NET programs

- Prototyped a shared memory module using C++ and C#
  - Created an automatic build/test system using PowerShell and VMware
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## EDUCATION

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### Florida Interactive Entertainment Academy at UCF

Exp. Dec 2010

#### Orlando, Florida

- M.S., Interactive Entertainment
- Current GPA: 3.96

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### Clemson University

2009

#### Clemson, South Carolina

- B.S., Computer Science; Minor, Mathematical Science
- Magna Cum Laude (Cumulative GPA: 3.88)
- Graduated with General and Departmental Honors

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## TECHNICAL SKILLS

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### Languages

- C / C++
- C#
- Java
- Lua
- Python
- Objective-C
- ActionScript 3.0
- PowerShell
- 68k Assembly

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### Tools

- Visual Studio
- GCC
- XCode
- Perforce
- Subversion
- Git
- Nvidia PerfHUD
- CxxTest
- NUnit
- NCover
- Doxygen
- Autodesk Maya

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### Engines / APIs

- Gamebryo
- Lightspeed
- Unity3D
- XNA
- SDL
- Xbox SDK
- iPhone SDK
- Flash CS4
- RakNet
- PhysX
- DirectX
- OpenGL
- FMod
- Box2D
- Farseer Physics