

# Casey Kirkruff

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## OBJECTIVE

A programming position in the games industry, experience producing and shipping professional titles, expand and deepen my skill set.

## EDUCATION

**B.S. of Computer Science, Minor in Japanese** September 2003 – June 2008  
University of California, Riverside

**Japanese Language and Cultural Studies** February 2005 – July 2005  
Tsuru College of Humanities, Tsuru, Japan

## EMPLOYMENT HISTORY

**Programmer/Analyst** December 2007 – current

*UCR Computer Science & Engineering, Riverside, CA*

Address problems on site with unique solutions that fit into the existing infrastructure, such as writing software to find and prevent common user problems, outfitting labs with virtualized environments for testing and instruction, and researching then implementing services such as iSCSI SANs and virtualized servers. Since starting here, my programs have streamlined the lab experience for students as well as the user management experience for administrators.

**Games Associate** July 2006 – October 2008

*XRTainment Zone, Redlands, CA*

Installed and maintained game machines with exercise-related peripherals, such as Gamebikes, Kilowatts, and Trazers. Observed customers and their interactions with the games to effectively set up machines to meet their preferences and streamline their experience. Under my tenure I established a set of practices for machine maintenance as well as for managing the user experience.

**Academic Excellence Workshop Coordinator** December 2005 – April 2006

*Bourns College of Engineering, Riverside, CA*

Assessed C++ proficiency of and provided supplemental instruction to small classes of undergraduate Computer Science students.

## RELEVANT EXPERIENCE

### Independent Game – “Eurythmos”

Currently hard at work on a 2D rhythm-action game utilizing C# and Microsoft’s XNA framework. The game is a beat-em-up in the vein of classics such as *Streets of Rage* but sets enemy movements and attacks to the soundtrack, meaning that as attack patterns increase in difficulty the player must pay increasing attention to the music to succeed. Plans include entry in the 2009 IGF and sale on XBLA Indie Games.

### Game Content Creation Tools – “Eurythmos”

Built content creation tools for Eurythmos to streamline development, including a level audio editor. More tools currently in production. Built using C# and the .NET framework and XML.

### Game Prototype – “Eurythmos”

Created a prototype of a 2.5D rhythm-based hack-n-slash game where players are tasked with attacking to the beat of the music. Worked in a small team- this served as a proof of concept for the game design and a primer for OGRE, Blender, and FMOD Audio.

### AI - Decision Tree

Designed and coded a decision tree to take in data sets and produce a tree that accurately predicts outcomes based on supplied parameters. Tested to predict the character value presented in an image and the likelihood of a patient having heart disease. Written in C++.

### User Data Analysis - KLR Music Recommender

Built a web-based music recommendation site using an algorithm to compare users’ preferences and recommend songs based on similarities therein, much like a simplistic Netflix. Worked in a group of three using MySQL and Ruby on Rails.

**Embedded Systems - Toy Piano**

Designed and implemented a toy piano using VHDL and C. Took input from a keypad and output corresponding tones on a single speaker. Used an FPGA to interface with the speaker, and an 8051 processor to handle input and timing. Capable of playing some old NES tunes.

**SKILLS****Languages**

- Proficient with C, C++, C#, Python, Ruby, SQL, Java, bash, PERL
- Familiar with MIPS Assembly, VHDL, LaTeX, HTML, PHP

**Systems**

- Operating Systems: Linux (Red Hat and Debian), Windows 98/2000/XP/Vista, Mac OS X
- Software: MySQL, PostgreSQL, emacs, vim, Visual Studio, Eclipse, Blender, Maya, VMware

*References and code samples are available both upon request and at my website.*