

JONATHAN CHAIM REUS

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EDUCATION AND RESEARCH

Fulbright Research Fellowship

September 2009 – June 2010

Research of cross disciplinary teams within the arts, STEIM, Amsterdam, NL

- Conducted technical research and development at STEIM in Amsterdam
- Explored the relevancy of instruments and embodiment in the context of computer-based music
- Researched practical concerns of building an artistic practice on ever-changing technology-driven mediums
- Developed music performance software for Mac OSX and the iPhone using Objective-C, C++, and Cocoa
- Worked with interactive art platforms including Arduino, and openFrameworks
- Studied the aesthetics of computer music with Joel Ryan at the Institute of Sonology in the Hague

Bachelor of Science, University of Florida

August 2000 – May 2005

Specialization in Digital Arts and Science

Minor in Mathematics, Composition of Electronic Music

Summa Cum Laude

- GPA 3.95
- 2002 Anderson Scholar of Highest Distinction
- One of 16 competitively selected from over 100 students to participate in an experimental program combining students of engineering and the fine arts in multidisciplinary team-driven coursework
- Math and Computer Science:** Human-Computer Interaction, Advanced Computer Graphics, Software Engineering, Computer Organization, Data Structures, Differential Equations, Linear Algebra, Numerical Analysis, Programming Language Design, System Simulation, Physical Computing
- Music and Fine Arts:** Digital Art and Montage, Time-based Media (Film & Animation), Audio Production and Sound Design, Music Composition, 3D Modeling & Animation

EMPLOYMENT

Web Developer/Web Marketing Consultant

March 2009 – September 2009

Marketing Performance Group, Boca Raton, FL

- Consulted clients on improving their businesses through internet marketing strategies
- Worked with business owners to develop marketing plans unique to their needs and budget
- Iteratively improved usability and sales funneling of client websites through analytics data and multivariate tests
- Conducted Search Engine Optimization audits of client websites, ensuring maximum customer reach through organic ranking
- Oversaw execution of web design and development

Software Engineer/Application Design

August 2006 – August 2008

University of Florida College of Medicine, Gainesville, FL

- Developed multi-tiered distributed applications using Oracle, J2EE, and the Struts MVC (Model 2) framework
- Worked in a team of three utilizing an agile test-driven development approach
- Programmed extensively in a Linux environment, writing numerous custom perl utilities for data processing
- Incorporated industry standard development tools for version control, project building and debugging
- Diagrammed and implemented highly-normalized relational database schema to promote flexibility and scalability of design
- Managed a complex code hierarchy of nearly 1000 files into organized libraries, some shared and some application unique

Senior Programmer/Webmaster

September 2005 – July 2006

Shox Inc, Gainesville, Fl

- Brainstormed web marketing strategies within a team of specialists in a cross-media marketing company
- Coordinated efforts between in-house designers, copywriters, and a programming team
- Configured and maintained web and database servers on Linux, Unix and Windows platforms
- Designed and developed custom job management software to streamline office workflow, improved efficiency over 50%

Awards

- 2006 Gold Addy Award: Web Design for UF Student Government Productions
- 2006 Silver Addy Award: Programming/Development for Hot as Pho website

Audio and Lighting Technician

August 2004 – December 2005

Spinal Tech, Gainesville, Fl

- Worked in a production company operating and maintaining equipment for large scale productions
- Performed live audio production, mic placement and mixing, using high-end live sound equipment

Computer Science Tutor/Teacher's Assistant

August 1999 – May 2000

Institute for Mathematics and Computer Science, Coconut Creek, Fl

- Assisted teaching K-12 students accelerated classes in computer science using MIT's Scheme language

SKILLS

Information Technology

- Experienced at writing data-driven software and designing complex database schema
- Programming Languages: Objective-C (Cocoa Framework), C, C++, Java., Scheme
- Server-side middleware: PHP5, Server-side Java (Struts framework), J2EE, JSP
- Server Setup/Maintenance: MySQL database, Oracle database, Linux (Fedora/Ubuntu), FreeBSD, OSX, Windows XP
- Working knowledge of W3C standards (HTML/CSS/DOM/JavaScript/XHTML/XML)
- 12+ years experience programming in object oriented languages beginning with C++

Multimedia, Art, & Design

- Composition and production of music using Cubase, Ableton Live, ProTools, etc
- Sound design
- Timeline-based editing in film, animation, and music
- Hand-drawn and digital 2D illustration and animation

ART & SCIENCE PROJECTS

Gesture Tracking Computer Controller

August 2004 – May 2005

Independent Project, Gainesville Fl

- Built a free-motion gestural computer instrument utilizing reflective gloves worn by the user
- Wrote software in C to track the performer's hand gestures using computer vision algorithms
- Conducted extensive user testing to improve upon interface design
- Composed and performed musical works featuring the instrument

"Honestly" Music Video

August 2003 – May 2004

Senior Production Project, University of Florida

- Led a team of three to produce a three-minute music video featuring the band Bracelet
- Directed filming and coordinated talent in a variety of locations
- Led pre-production efforts including brainstorming, concept art generation, storyboarding, and previsualization
- Performed fine-grain linear editing and music syncing with hours of raw footage using Adobe's Premier and After Effects

- Authored DVD media and packaging
- Premiered music video at the 2004 Coney Island Film Festival

Open GL Video Game

April 2004

Advanced Structures in Computer Graphics Mid-semester Project, University of Florida

- Programmed a rudimentary first-person shooter using Open GL and C++ in a Linux-based environment
- Implemented an interactive 2D GUI map overlaying the visible 3D world
- Sculpted original low-poly 3D models in 3D Studio Max

IT PROJECTS

PHP MVC Framework

June 2007 – July 2007

Independently Developed Programming Framework, Gainesville FL

- Developed a PHP5 model-view-controller framework for rapid development in freelance work
- Utilized PHP5's OOP features to provide extensibility in all aspects of the framework
- Features include:
 - Improved session handling for more complex memory constructs such as singletons
 - True type-safe enumerated types
 - Robust data validation objects including protective measures against SQL injection attacks
 - Database abstraction layer with extensibility hooks for any PHP-compatible DBMS
 - Top level exception-driven error handling
 - Lightweight and flexible object-relational-mapping framework supporting both hand-written and algorithmically generated SQL queries

Shox Job Management System

October 2005 – January 2006

Distributed Web Software, Gainesville FL

- Independently developed web-based distributed job management software for a printing and marketing company
- Conducted efficiency research and analysis on the company's business processes
- Designed and programmed a PHP-driven software solution based on the research results
- Implemented relational database schema using the MySQL open-source database server
- Set up and maintained a Linux/Apache/MySQL/PHP web server to deploy the software over the office intranet

ME

Currently based out of Amsterdam. I'm a lover of music, and an avid guitarist, pianist, banjoist and harmonica player depending on the stage of the moon. In my spare time I'm usually composing music, learning new APIs, painting, traveling, or meditating on issues of great social and political import.