

#### **EDUCATION**

# **Stanford University**

Stanford, CA

Master of Arts – Music, Science and Technology (expected) 2009 (current GPA 3.835) President – Audio Engineering Society, Stanford Chapter

### **University of Massachusetts-Lowell**

Lowell, MA

Bachelor of Science - Business Administration 2004
Dual Major –Information Systems and Finance
Minor - Music Theory

### ACADEMIC RESEARCH

September 2008 to June 2009

#### **Stanford University**

Stanford, CA

CCRMA Graduate Student

- Developed The LUMI: A new musical controller for expressive performance, incorporating a touch screen, 32 pressure sensitive buttons, 8 knobs, a cross-fader and IR proximity sensor.
  - o Physical Interaction Design Designed LUMI interface from the ground up.
  - Hardware Designed circuits and PCB for sensor integration.
  - o Software Developed C++ API for LUMI visual interface development (Based in OpenGL).
  - o Performances Conducted 4 live public performances of electronic music using the LUMI.
  - Featured on Wired.com and Create Digital Music.
- Developed various C++ applications for real-time audio processing and visualization.
- Researched musical timing for expressive performance in Matlab using beat tracking and onset detection.
- Modeled the Leslie effect in Matlab (VST plug-in in development).
- Developed conText: A Java-Based ear training application.

# **WORK EXPERIENCE**

June 2004 to August 2008

### Liberty Mutual Group

Boston, MA

Personal Market Product Management - Property Research

Senior Research Analyst

- Conducted research in all facets of the Property Insurance Product to enhance product design and profitability.
- Coordinated large-scale socio-economic research initiatives throughout all segments of the United States Property Insurance book of business (2.1 million policyholders).
- Managed cross-department research projects from conception to delivery.
- Earned title of 'Subject Matter Expert' in new data technologies.
- Developed and deployed statistical modeling tools based in the SAS and Java programming languages.
- Implemented general data tools and new data management techniques.
- Developed SAS data models for statistical research and monitoring of new rating/pricing programs.
- Designed and deployed a fully secure, 50+ user, visual basic application for data management and reporting.
- Consulted with top management on the development and implementation of a new enterprise data warehouse
- Designed and delivered lectures/corporate training on MS Access, relational database design and architecture.
- Developed models to analyze consumer behavior and customer elasticity.

December 2001 to May 2004

# The Music Place

North Reading, MA

- Assistant Store Manager and Instructor
- Instructed 20+ piano students Classical, Jazz, Early 20<sup>th</sup> Century styles.
- Performed general management duties.
- Performed repair and maintenance work on guitars, amps and keyboards.
- Designed and maintained database to track and anticipate client buying trends/monthly sales.
- Performed general accounting activity Accounts Payable/Accounts Receivable/Sales Tax.

### **AWARDS**

- Platinum and Silver-level BRAVO awards for high pressure, time sensitive research 2007
- Diamond-level (highest honor) BRAVO award for process automation (1 awarded every 2 years)

   2006
- Hunt Memorial Scholarship 2000

#### **SYSTEMS**

- Programming Languages C++, C, Java, SAS, Visual Basic, SQL, ChucK, Max/MSP, CSound
- Software Matlab, SAS, R, Teradata, Microsoft Office, Dreamweaver, Logic Pro, ProTools, Ableton Live
- Hardware Arduino and Atmel AVR Low-level C programming for hardware interfacing.

## **INTERESTS**

- Live Electronic Music Performance Performed live at venues in San Francisco and Boston.
- Sound Engineering
  - o Recording engineer at New Orleans Jazzfest 2009 (April 30-May 3, 2009)
  - o Live sound engineer at The Compound, San Francisco (April 2009)
- Human Computer Interaction Live Musical Controllers and Gestural Recognition