

B E A U S I L V E R

Software Engineer
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Mission

I write code for multimedia, wellness and educational applications to support self-expression, well-being and the pursuit of knowledge.

Education

Stanford University - 2011-2013

Master's in Music, Science and Technology @ CCRMA

Advisor: Chris Chafe at the Center for Computer Research in Music and Acoustics (CCRMA)

University of Miami - 2003-2007

Bachelor's in Music Engineering and Computer Science

Advisor: Ken Pohlmann

Work Experience

Avid

Senior Software Engineer: 2015 - present

Software Engineer: 2010 - 2015

C++ application-level developer for DAW controller mixing consoles

iOS developer for mixer apps

Products:

Pro Tools | Control - iOS app for audio workstation control

Avid S3 - one of two main developers, shipped on time

Artist Mix - developed through multiple shipping cycles

Artist Control - developed through multiple shipping cycles

Artist Transport & Artist Transport - fixed bugs

EUCON - Actively maintain protocol and manage release of SDK for 3rd party developers

Tools: Xcode and Visual Studio

Experience with: object oriented paradigms, multithreading, x-plat, remote object systems

Installer team deadline and task manager

Source Control Administrator (Accurev)

MindSong

Technical Lead: 2014 - present

Biofeedback wellness iOS application that converts brain waves into music

Uses both the Neurosky MindWave and Interaxon Muse EEG headsets

Currently available on iOS App store

<http://mindsong.io/>

Makey Makey

Technical Consultant: 2010 - present

MM is an educational toolkit that boosts creative confidence; we believe everyone is an inventor

Euphonix

Software Engineer: 2007 - 2010

C++ developer for System 5 digital mixing console

Architected Python automated test framework

Architected Python automated build system for Perforce/Accurev

Started as Quality Assurance Engineer

THX

Software Intern: Summer of 2007

Various programming projects for next generation audio products

Weeks Recording Studio

Studio Manager: 2005 - 2007

Oversee all aspects of the University of Miami Weeks recording studio

Staffing, session booking, engineer licensing, new equipment purchasing and repairs for Euphonix System5 Digital Console, 24-bit, 96kHz, 5.1 surround, 48-track, multi-room facility

Software Skills

Proficient in - C++, Objective C & Python

Dabble In - Matlab, SQL, Swift, Pure Data (ability to learn new languages)

Strengths - large codebases, large projects, rapid prototyping, team environment

Certifications & Qualities

Scrum Master - certified by National Scrum Alliance

Manager Trained - "Transitioning to Manager" (by Effective Training Associates)

Delegation And Coaching Training - (by Effective Training Associates)

Personal Qualities - non-linear thinker, collaborator, communicator & team player

Projects

Face Replace iPhone App

In Apple App Store since July 2013. Users place their face into a wide range of fun pictures. Users can add text and draw onto the picture using touch. This project demonstrates proficiency in fundamental iOS 6 APIs

<http://www.beausilver.com/faceplace/>

In*Spire

iPhone app prototype for breath awareness using accelerometer for audio biofeedback

User Experience Testing – Over 50 users tested at CCRMA Modulations, SF - April 2012, via interactive sound/art installation. Users experienced relaxation and heightened awareness of breath.

MP3 Encoder/Decoder

Wrote MPEG encoder/decoder from scratch in Python under the advisement of Marina Bosi. Involved data compression via audio DSP processing involving FFT, MDCT, masking curves, threshold of hearing, quantizing and floating point conversion. Studied quantization noise in time/freq domain. Facilitated listening tests and participated in listening tests at Dolby Labs.

Marimba Music Box

Created automated marimba using solenoids powered by Arduino microcontroller and Beagle Board SBC running Linux. As the player turns a motorized handle, solenoids strike the keys and the player receives haptic feedback, analogous to a toy music box.

<https://www.youtube.com/watch?v=bMTvGbe1xME>

Bananamophone

Created banana instrument using Arduino microcontroller kit 'Makey Makey'

Performed at Stanford Electromadness concert, May 2012, over 13k youtube views:

https://www.youtube.com/watch?v=K4Y_M4GpyOM

Events / Fun

Real Industries Interview - *Sept, 2015* - Google Hangout on day-to-day of software engineering
Fox News New York Interview - *Feb, 2015* - Described Makey Makey at Toy Faire
Toy Faire New York - *Feb, 2015* - Ran 'Makey Makey' booth
Google Interactive Sound - *Aug 2014* Sound design for interactive life-size unicorn painting
Maker Camp - *Aug 2014* - Online video interview for 2000+ Maker campers regarding Makey Makey
Silver Mendez performs @ Topanga Days *May 2014*
KZSC's Artists on Art - *Feb, 2014* - Radio Interview with Nada Miljkovic regarding Stanford
Maker Faire San Mateo - *May, 2014* - Ran 'Makey Makey' booth / created instrument demos
Toy Faire New York - *Feb, 2014* - Ran 'Makey Makey' booth
Maker Faire San Mateo - *May, 2015* - Ran 'Makey Makey' booth / created instrument demos
Maker Faire Performance - *May, 2015* Bananamaphone
<https://www.youtube.com/watch?v=RBP-p3MP7Qo>
Strike A Chord - *Dec, 2012* website showing cortical plasticity - rhythmic chord accuracy game
<https://ccrma.stanford.edu/~beau/251/web/index.html>
CCRMA Modulations - *Aug 2012* - Tested 'In*spire' on 50 people at interactive installation in SF
<https://www.youtube.com/watch?v=jwPtFm6gUx4>
PayPal Labs TechXploration - *Sept, 2012* Performed interactive edible instruments
Aids Ride Lifecycle - *June, 2012* - biked from SF to LA, collectively raised ~ \$12.5 million
Maker Faire San Mateo - *May, 2012* - Ran 'Makey Makey' booth / created instrument demos
Spencer's Night Ride *May 2012* - Sound Design for early stage startup 'Read Imagine'
MP3 Encoder/Decoder - *March, 2012* Wrote MPEG encoder/decoder from scratch in Python
Crying Charlie - *March, 2012* "Tuned for empathy" - sound design to evoke emotional charge
Santa Cruz Triathlon - *June 2011*
Scratch Programming Language - *June 2009* - Created various sounds for MIT programming lang
Certified Yoga Teacher - *June, 2010* San Francisco Integral Yoga Institute
Outstanding Graduating Senior - *May, 2007*- University of Miami Music Engineering
AES SF - *?2007*- Placed in 'Sound For Picture' completion with custom Monster's Inc folly reel
Recording Studio Manager *Sept, 2004* - *May, 2006* University of Miami Weeks Studio
Teal Sound Drum and Bugle Corps - *Aug, 2002* traveling marching band, performed in DCI finals

