

## EDUCATION

### Massachusetts Institute of Technology

Master of Engineering in Electrical Engineering and Computer Science (2016) GPA: 5.0/5.0

Bachelor of Science in Physics and Computer Science and Engineering (2014) GPA: 4.9/5.0

Minor in Music (2014)

## WORK EXPERIENCE

### Self-Employed

*Music Technology Consultant*

Cambridge, Massachusetts

Sep 2016 -

I am a creative engineer with a broad technical background, software engineering experience in industry, and significant experience working on music technology projects in academia. I work on MIR, composition frameworks, data sonification, musical mapping, musical performance systems, DSP, and related projects.

### Responsive Environments

*Graduate Research Assistant, MIT Media Lab*

Cambridge, Massachusetts

Sep 2014 - Jan 2016

### Responsive Environments

*Undergraduate Researcher, MIT Media Lab*

Cambridge, Massachusetts

Jun - Sep 2013

Used sound-spacialization techniques to render an immersive sonic environment as a way of interfacing with a sensor network—in this case a wetland environment outfitted with highly extensible sensor nodes. Developed a platform for creating immersive, interactive musical compositions driven by the sensor network.

### Benchling Inc.

*Software Engineering Intern*

San Francisco, California

Jun - Aug 2014

Designed and implemented Benchling's first user-facing API. Designed and implemented new features for Benchling's platform including an image editing tool and a bacterial colony counting tool.

### music21

*Undergraduate Researcher, MIT music department*

Cambridge, Massachusetts

Jun - Aug 2012

Worked on "music21" a software "toolkit for computer-aided musicology."

Designed and implemented features such as "scoreDiff" which makes it easy to find, store, and display differences between similar passages of music.

## EXTRACURRICULAR

Four year recipient of the *Emerson Scholarship* for cello performance

Eleven years of chamber music and orchestra experience

Music composition and sound art projects

Managed a cooperative, nightly dining plan for 50+ people, developed schedule planning software

## SKILLS

Experience with laboratory equipment

Experience prototyping with microcomputers

Signal Processing (Analog and DSP)

Data analysis

Advanced: Python/Flask, JavaScript/Node/ReactJS, C, Java, L<sup>A</sup>T<sub>E</sub>X, MaxMSP

Intermediate: C++

Basic: Haskell, MatLab

Cricket Whistle and Throat Singing