nharada@umich.edu                                             nateharada.com

# Nathan P. Harada

## PROFESSIONAL EXPERIENCE

**University of Michigan**                                             **Ann Arbor, MI**
*Graduate Student Research Assistant*                      August 2014 – Present
- Investigate new computational methods for predicting cardiac complications and morbidities
- Apply machine learning techniques to segregate patients based on predicted post-op atrial fibrillation risk

**iZotope, Inc**                                                      **Cambridge, MA**
*DSP Intern*                                              May 2013 – August 2013
- Researched time and spectral pitch detection algorithms for audio pitch correction software.
- Implemented and evaluated pitch algorithm candidates and realized 10% improvement from current method.
- Developed analysis and visualization frameworks for future algorithm improvements.

**Tufts University Lilly Music Library**                               **Medford, MA**
*Student Librarian*                                       August 2011 – May 2014
- Supervised during library closing, assisted patrons and trained new student workers.

**Digital Design Corporation**                                **Arlington Heights, IL**
*Software Engineer*                                       Summer 2010, 2011, 2012
- Designed and programmed intercom control software suite with a small team of engineers.
- Developed test equipment, firmware, and various I2C sensors for intercoms with other hardware engineers.
- Researched and designed an active muffler system for industrial blowers with a cross-functional team.

**Digital Design Corporation**                                **Arlington Heights, IL**
*Summer Intern - Software Engineer*                            Summer 2008, 2009
- Tested network loudspeakers and control software. Developed test applications for Windows in .NET and Python.

**The Burbz Newspaper**                                               **Lake Zurich, IL**
*Website Administrator*                                   February 2009 – June 2009
- Managed all web-based assets and wrote software scripts for "The Burbz", a local newspaper.

## EDUCATION

**University of Michigan**                                             **Ann Arbor, MI**
- Master of Science in Computer Science anticipated April 2016

**Tufts University**                                                  **Medford, MA**
- Bachelor of Science in Electrical Engineering, May 2014
- Cumulative GPA: 3.73/4.00
- Dean's List each term, Eta Kappa Nu officer

**Lake Zurich High School**                                           **Lake Zurich, IL**
- Graduated June 2010 | Highest Honors in every term | GPA: 3.70/4.00

## TUFTS ACTIVITIES

**Tufts University Concert Board**                                         **2010 – 2014**
- Leader of organization that promotes small and large concert performances on campus.
- Booked acts for Spring Fling and Cage Rage – large, campus-wide concerts.
- Managed student volunteers and assisted both talent and production personnel.

**Hip-hop for Social Change**                                             **2010 – 2011**
- Managed and organized two fundraising hip-hop festivals focused on sparking social and political change.

**Tufts Men's Ultimate Frisbee Team**                                     **2010 – 2014**

## SKILLS
- Software: Windows, Linux, Microsoft Office, SciPy/NumPy
- Languages: Python, C, C++, MATLAB, C#, Clojure, Haskell, Assembly
- Skills: Machine Learning, Signal Processing, Noise Cancellation, Microprocessors, Hardware