# Nathan P. Harada

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#### PROFESSIONAL EXPERIENCE

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 (Granoff Music Building)

Medford, MA

Student Librarian

August 2011 - present

- Term-time employment during school year (8 hours per week).
- Assist patrons and faculty members to assure satisfaction in the use of library resources.

### **Digital Design Corporation**

Arlington Heights, IL

Software Engineer

Summer 2010, 2011, 2012

- Part-time employment during summer and school year at a privately-held provider of FPGA systems and products for military, medical, industrial and automotive industries.
- Designed and programmed Windows 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 2008, 2009

- Summer Intern Software Engineer
  - Summer Intern and part-time employment during school year.
    - 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

- Part-time employment during high school. Managed all web-based assets for "The Burbz", a local newspaper.
- Wrote software scripts to consolidate calendars for all nearby towns.

## **EDUCATION**

**Tufts University** Medford, MA

- Bachelor of Science in Electrical Engineering anticipated in May 2014 | Minor in Music Engineering
- Cumulative GPA: 3.76/4.00
- Dean's List each term, Eta Kappa Nu member

#### Lake Zurich High School

Lake Zurich, IL

- Graduated June 2010 | Highest Honors in every term | GPA: 3.7/4.0
- On exec board of National Honor Society, captain of Swim team, head theater electrician, jazz band, pit orchestra

#### **TUFTS ACTIVITIES**

## **Tufts University Concert Board**

2010 - Present

- 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. Events included performances featuring international and local artists and panel discussions on the role of hip hop in sparking social and political changes.

#### **Tufts Men's Ultimate Frisbee Team**

2010 - Present

#### **SKILLS**

- Software: Windows, Linux, Microsoft Office, Matlab, SciPy/NumPy
- Languages: C, C++, Python, C#, C++/CLI, HTML, JavaScript, Haskell, Assembly
- Skills: Microcontrollers, Low level programming, Analog design, Machine Learning, Signal Processing, ANC