# GENEVIEVE FLASPOHLER

209 Blake Building, Mailstop 7<br/> $\diamond$  Woods Hole Oceanographic Institution  $\diamond$  Woods Hole, MA 02543<br/> (906)  $\cdot$  370  $\cdot$  9318  $\diamond$  geflaspohler@gmail.com  $\diamond$  geflaspohler.com

### **EDUCATION**

# Massachusetts Institute of Technology &

September 2016 - Present

# Woods Hole Oceanographic Institution Joint Program

Ph.D. Student in Computer Science and Applied Ocean Engineering

Advisor: Yogesh Girdhar - warp.whoi.edu

# University of Michigan

September 2012 - June 2016

B.S.E. in Computer Engineering GPA: 3.980, Summa Cum Laude

Relevant coursework: digital signal processing, computer vision, data structures & algorithms, microprocessor systems, computer architecture, probability, autonomous robotics, operating systems

### RESEARCH EXPERIENCE

# Massachusetts Institute of Technology & Woods Hole Oceanographic Institution

Cambridge, MA September 2016 - Present

· Graduate Student Research Assistant, Electrical Engineering and Computer Science

# Woods Hole Oceanographic Institution

Woods Hole, MA

January 2015 - January 2016

- · Developed MATLAB algorithms to process data collected from ITAG, a custom embedded animal biotelemetry device for marine invertebrates, and predict animal gait and movement
- · Designed modification to Loggerhead Instruments OpenTag sensor board, allowing the addition of peripheral sensors interfaced through I2C communication bus
- · Ran live experiments on squid carrying ITAG and OpenTag at the Woods Hole Shore Laboratory
- · Research supported by NSF REU grant

## University of Michigan

Ann Arbor, MI

September 2014 - May 2015

- · Designed and prototyped custom embedded hardware to transmit and receive vibratory communications
- · Developed on-off keying modulation and digital signal processing firmware to send and interpret vibratory signals in real-time
- · Presented published work in the ACM Hot Wireless Workshop 2015, Paris, France

## INDUSTRY EXPERIENCE

## **FANUC Robotics America**

Rochester Hills, MI

May 2014 - August 2014

- · Developed a user-friendly, cross-browser compatible web interface for FANUC robot controllers
- · Programmed robot showcase application for the International Machine Tools Show
- · Gained proficiency in HTML, CSS, JavaScript and received FANUC robot safety and control training

## CONFERENCE AND WORKSHOP PUBLICATIONS AND PRESENTATIONS

- 1. Adkins, J., **Flaspohler, G.**, & Dutta, P. (2015, September). Ving: Bootstrapping the Desktop Area Network with a Vibratory Ping. In Proceedings of the 2nd International Workshop on Hot Topics in Wireless (pp. 21-25). ACM. Chicago
- 2. **Flaspohler, G.** (2013, January). Effects of prostheses on the metabolic cost of walking for lower-limb amputees. Poster and presentation at the Michigan Research Community Symposium, Ann Arbor MI.

## TEACHING EXPERIENCE

## University of Michigan

Ann Arbor, MI

EECS 281: Advanced Algorithms and Data Structures

January 2016 - June 2016

ENGR 100: Introduction to Human Centered Design

January 2013 - June 2015

### AWARDS AND GRANTS

- 1. National Science Foundation Graduate Research Fellowship, \$102t,000 plus tuition (2016 Present)
- 2. University of Michigan's Engineering Distinguished Achievement Award, \$500 (May 2016)
- 3. University of Michigan's EECS William L. Everett Student Award of Excellence, \$500 (May 2016)
- 4. University of Michigan's EECS Scholar, \$500 (May 2016)
- 5. NSF REU Undergraduate Research Award, \$1,500 (May 2015)
- 6. University of Michigan's Electrical Engineering and Computer Science Outstanding Achievement Award, \$500 (May 2015)
- 7. University of Michigan's Marian Sarah Parker Prize, \$1,000 (May 2015)
- 8. University of Michigan's Darl F. and Lorene O. Caris Dean?s Merit Scholarship full-ride, \$130,000 (September 2012 May 2016)