

# GENEVIEVE FLASPOHLER

209 Blake Building, Mailstop 7◇ Woods Hole Oceanographic Institution ◇ Woods Hole, MA 02543  
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## EDUCATION

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**Massachusetts Institute of Technology & Woods Hole Oceanographic Institution Joint Program** *September 2016 - Present*  
Ph.D. Student in Computer Science and Applied Ocean Engineering  
Advisor: Yogesh Girdhar - *warp.who.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, micro-processor systems, computer architecture, probability, autonomous robotics, operating systems

## RESEARCH EXPERIENCE

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**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

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**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

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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

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### 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

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1. National Science Foundation Graduate Research Fellowship, \$102,000 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)