# Thomas Weng

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## **EDUCATION**

Carnegie Mellon University
PhD in Robotics
Advisor: Dave Held

Yale University
B.S. Computer Science & B.A. Economics
GPA: 3.77 / 4.0 with distinction in the C.S. major
Senior Thesis Advisor: Brian Scassellati

## **Honors**

Graduate Research Fellowship Award, National Science Foundation	2019
Graduate Research Fellowship Honorable Mention, National Science Foundation	2018
Computer Science Research Prize, Yale University	2015
Trumbull College Scholarship for Economics, Yale University	2014
Maher Family Scholarship, Yale University	2013 - 2014

## **PUBLICATIONS**

- [C4] Weng, T., Perlmutter, L., Nikolaidis, S., Srinivasa, S., and Cakmak, M. Object Referencing through Situated Legible Projections. *IEEE International Conference on Robotics and Automation (ICRA), forthcoming.* IEEE, 2019.
- [C3] Sefidgar, Y.\*, **Weng, T.**\*, and Cakmak, M. RobotIST: Interactive Situated Tangible Robot Programming. *Proceedings of the Symposium on Spatial User Interaction*. ACM, 2018.
- [C2] Admoni, H., **Weng**, **T.**, and Scassellati, B. Modeling communicative behaviors for object references in human-robot interaction. *IEEE International Conference on Robotics and Automation (ICRA)*, pages 3352-3359. IEEE, 2016. Acceptance rate: 35%
- [C1] Admoni, H., Weng, T., Hayes, B. and Scassellati, B. Robot nonverbal behavior improves task performance in difficult collaborations. *ACM/IEEE International Conference on Human Robot Interaction (HRI)*, pages 51-58. IEEE Press, 2016. Acceptance rate: 25%

#### RESEARCH AND WORK EXPERIENCE

University of Washington Human-Centered Robotics Lab Research Scientist with Prof. Maya Cakmak	2017 - 2018
Microsoft Corp., Al and Research Software Engineer on Bing	2015 - 2017
Yale University Social Robotics Lab Undergraduate Researcher with Prof. Brian Scassellati	2014 - 2015
Yale University Student Technology Collaborative Student Developer	2014 - 2015
Microsoft Corp., Applications and Services Group Software Engineer Intern on Bing	Summer 2014
Microsoft Corp., Applications and Services Group Program Manager Intern on Bing Ads	Summer 2013
JPMorgan & Chase, Credit Risk Management Office Intern	Summer 2012

## **OUTREACH**

Code Haven at Yale guest speaker, New Haven, CT

Spoke with students at under-served New Haven public schools about STEM careers.

2017

Trumbull College Mellon Forum speaker, Yale University

Presented thesis at a selective opportunity for seniors to share their work with peers.

2015

Yale Social Robotics Lab open house, Yale University

Participated in semi-annual open house for approx. 100 kids and adults in the New Haven community.

2015

2017

TEACHING EXPERIENCE AND MENTORSHIP

Mentor, CMU Master's in Research and Software Development Team

2018 - present

Teaching Assistant, UW CSE 481C - Robotics Capstone

2018 - present

Patrick Liu, undergraduate
Amith P, undergraduate

2018 - present

LEADERSHIP EXPERIENCE

**Graduate Student Assembly Representative**, Carnegie Mellon University *Elected representative of graduate students at the CMU Robotics Institute.* 

2018

Tour Manager, Yale Alley Cats a cappella group

Managed domestic and international tours for one of the nation's most well-traveled a cappella groups.

2012 - 2014

**TECHNICAL SKILLS** 

**Robotics** 

Languages C/C++, Python, MATLAB

Tools ROS, Movelt!, OpenCV, MuJoCo, OpenRAVE, Unity

Machine Learning PyTorch, Tensorflow

Robots PR2, Fetch, Baxter, Sawyer, Kuka KR210, Aldebaran Nao

Web Development

Languages JavaScript, C#.NET, Python, Ruby Frameworks React, Node.js, Django, Ruby on Rails