

Thomas Weng

<https://thomasweng.com> · (917)-280-0039 · tweng@cmu.edu

EDUCATION

Carnegie Mellon University

PhD in Robotics

Advisor: Dave Held

2018 - present

Pittsburgh, PA

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

2011 - 2015

New Haven, CT

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., AI 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

Girls of Steel FIRST Robotics mentor, CMU Robotics Institute

Mentoring the all-girls, inter-school team on a weekly basis.

2018

| | |
|---|-------------|
| Code Haven at Yale guest speaker , New Haven, CT <i>Spoke with students at under-served New Haven public schools about STEM careers.</i> | 2017 |
| Trumbull College Mellon Forum speaker , Yale University <i>Presented thesis at a selective opportunity for seniors to share their work with peers.</i> | 2015 |
| Yale Social Robotics Lab open house , Yale University <i>Participated in semi-annual open house for approx. 100 kids and adults in the New Haven community.</i> | 2015 |

TEACHING EXPERIENCE AND MENTORSHIP

| | |
|--|-----------------------|
| Mentor, CMU Master's in Research and Software Development Team | 2018 - present |
| Teaching Assistant, UW CSE 481C – Robotics Capstone | 2017 |
| Patrick Liu , undergraduate | 2018 - present |
| Amith P , undergraduate | 2018 - present |

LEADERSHIP EXPERIENCE

| | |
|---|--------------------|
| Graduate Student Assembly Representative , Carnegie Mellon University <i>Elected representative of graduate students at the CMU Robotics Institute.</i> | 2018 |
| Tour Manager , Yale Alley Cats a cappella group <i>Managed domestic and international tours for one of the nation's most well-traveled a cappella groups.</i> | 2012 - 2014 |

TECHNICAL SKILLS

Robotics

| | |
|------------------|---|
| Languages | C/C++, Python, MATLAB |
| Tools | ROS, MoveIt!, 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 |