# MICHELLE A. LEE

## **EDUCATION**

Ph.D. Candidate at Stanford University	Jan 2018- Present
Mechanical Engineering GPA: 3.99/4.0	
Masters of Science at Stanford University	2015-2018
Mechanical Engineering GPA: 3.94/4.0	
Bachelors of Science at Stanford University	2010-2015
Chemical Engineering GPA 3.82/4.0	

#### **HONORS**

IEEE ICRA 2019 Best Conference Paper Award	2019
IEEE ICRA 2019 Best Paper Award in Cognitive Robotics Finalist	2019
Accel Innovation Scholar, selective entrepreneurship program for PhD candidates, Stanford	2019
Mayfield Fellow Program, selective technology fellowship program, Stanford	2015
Stanford Build Tech Grant, \$3000 awarded to selected robotics engineering project, Stanford	2014
Tau Beta Pi, top 12% (junior year) of 2015 engineering class based on GPA, Stanford	2013
Presidential Scholar Semifinalist, USA	2010
Vanderpoel Prize, student with most distinguished record in science, St. Paul's School	2010

#### **PUBLICATIONS**

**Lee, M. A.**, Zhu, Y., Zachares, P., Tan, M., Srinivasan, K., Savarese, S., Fei-Fei, L., ... & Bohg, J. (2019). Making sense of vision and touch: Learning multimodal representations for contact-rich tasks. (Under review at IEEE Transactions on Robotics).

Martín-Martín, R., Lee, M. A., Gardner, R., Savarese, S., Bohg, J., & Garg, A. (2019). Variable Impedance Control in End-Effector Space: An Action Space for Reinforcement Learning in Contact-Rich Tasks. In 2019 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS). IEEE.

**Lee, M. A.\***, Zhu, Y\*., Srinivasan, K., Shah, P., Savarese, S., Fei-Fei, L., ... & Bohg, J. (2019). Making sense of vision and touch: Self-supervised learning of multimodal representations for contact-rich tasks. In 2019 IEEE International Conference on Robotics and Automation (ICRA). IEEE.

# **REVIEWED WORKSHOP PAPERS/EXTENDED ABSTRACTS**

Martín-Martín, R., <u>Lee, M. A.</u>, Gardner, R., Savarese, S., Bohg, J., & Garg, A. Variable Impedance Control in End-Effector Space: An Action Space for Reinforcement Learning in Contact-Rich Tasks. In 2019 RSS Women in Robotics Workshop.

**Lee. M. A.,** Zhu, Y.,... & Bohg, J. (2019). Variational multimodal representations for contact-rich tasks. In 2019 RSS Workshop on Scalable Learning for Integrated Perception and Planning Workshop.

**Lee. M. A.\***, Zhu, Y.\*,... & Bohg, J. Learning Multi-Modal Representations for Contact-Rich Manipulation Tasks. In 2018 RSS Women in Robotics Workshop.

#### WORK EXPERIENCE

#### Stanford AI Lab (Stanford, CA)

Aug '17-Present

Research Assistant

- Combining different sensor modalities, such as vision and touch
- Deep learning and reinforcement learning for perception and controls for robot manipulation

#### **NVIDIA Robotics** (Seattle, WA)

June '19 - Sept '19

Robotics Research Intern

• Reasoning under uncertainty for robotic manipulation

## LCY (Huizhou, China & Taipei, Taiwan)

June '16- April'17

Special Projects Engineer

6-member special projects team to oversee and design a new automated production line at factory

## SpaceX (Hawthorne, CA)

Sept '15- Dec '15

Vehicle Engineering Intern

Designed flight parts for second stage rocket from design to manufacturing to stress testing

# Sano (San Francisco, CA)

June '14-Sept '14

**Engineering Intern** 

• Developed the first enclosure prototypes for a next-gen metabolite-sensing wearables product

#### LEADERSHIP EXPERIENCE

#### Stanford AI Lab (SAIL) Blog

Sept 18- Current

Founding co-editor-in-chief

- Launched blog for the Stanford AI Lab that features SAIL research, written for general audiences
- Edited blog, solicited writing from lab members, created editorial guideline

#### Stanford AI Lab Robotics Lunch

Jan 19- Current

Co-organizer

• Bi-weekly luncheon for researchers to present original research on robotics, manipulation, perception.

Stanford AI Salon Sept 18-Sept 19

Co-organizer

- Organizes bi-weekly salon event on big picture questions in A, inviting speaker, moderating the panel
- Moderated and organized a public AI Salon event on the Future of Work with over 500+ participants

Tau Beta Pi Sept '14- June '15

Professional Development Co-Chair

Organized small intimate dinners for Tau Beta PI members with Silicon Valley founders and VC's

#### Wireless Mobile Controlled Electric Vehicle

Jan '14- June '15

Project Founder & Team Lead

Led 15 students to build an iPhone-controlled EV, winning the Stanford Build Tech Grant

# **TEACHING EXPERIENCE**

Instructor, Stanford AI4ALL, taught 9th grade girls machine learning and statistics

TA, CS 326: Topics in Advanced Robotic Manipulation (graduate-level course)

Fall '17

TA, Industrial Revolution Camp (robotics & entrepreneurship camp for low income students)

Summer '16

# **ADVISING & MENTORSHIP EXPERIENCE**

Stanford AI Lab Grad/Undergrad Mentorship Program Mentor	April '18- Current
Ria Doshi (High school student '22)	Aug '18-Current
Peter Zachares (Stanford ME Masters '19)	Sept '18- Current
Matthew Tan (Stanford CS Undergraduate '20)	Oct '18- Current
Rachel Gardner (Stanford CS Undergraduate '20)	Oct '18- Current

# **REVIEWING ACTIVITIES**

Conferences: IEEE International Conference on Robotics and Automation (ICRA), Robotics: Science and Systems (RSS)