

# JUDY HANWEN SHEN

MIT Media Lab - 75 Amherst St. - E14-464K - Cambridge, MA 02139

judyshen@mit.edu - [heyyjudes.github.io](https://github.com/heyyjudes) - 425-589-7612

## EDUCATION

---

### Massachusetts Institute of Technology

2017–Current

Master of Science

Advised by Rosalind Picard

Affective Computing - MIT Media Lab

CGPA: 5.0/5.0

### University of Toronto

2012–2017

Bachelor of Applied Science in Engineering Science

Electrical and Computer Engineering Option

High Honors (Top 3%)

Faculty of Applied Science and Engineering

CGPA: 3.9/4.0

## RESEARCH EXPERIENCE

---

### MIT Media Lab

September 2017– Current

*Graduate Research Assistant*

*Advisor: Rosalind Picard*

- Fair classifiers for subjective labeling tasks (Thesis committee: Antonio Torralba and Sendhil Mullainathan).
- Pragmatic and semantic modeling of simple reference games (with Roger Levy - MIT Brain and Cognitive Sciences).
- Automated matching methods for investigating stylistic bias in sentiment analysis models (with Alexander M. Rush - Harvard SEAS).

### University of Toronto Department of Computer Science

September 2016–May 2017

*Thesis Student*

*Advisor: Frank Rudzicz*

- Detecting anxious behavior on Reddit: extracted semantic and topic features to study communication patterns of Reddit users with anxiety. This includes both identifying the difference between anxious Reddit posts and regular Reddit posts in linguistic expression and finding features and patterns consistent with existing psychology literature.

### National University of Singapore

#### Electrical and Computer Engineering

May 2013–August 2013

*Summer Research Student*

*Advisor: Anjam Khursheed*

- Recreating great discoveries and inventions in physics: developed hands-on demos/experiments that can assist the teaching of physics/engineering principles in schools, polytechnics and universities in Singapore. Experiments created include an oscillating cylinder compressed-air engine, a pendulum-weight mechanical clock and a vacuum pump and chamber.

## PUBLICATIONS AND PEER-REVIEWED WORKSHOPS

---

### Comparing Models of Associative Meaning:

#### An Empirical Investigation of Reference in Simple Language Games

October 2018

Proceedings of the 22nd Conference on Computational Natural Language Learning (CoNLL 2018)

**JH. Shen**, M. Hofer, B. Felbo, R. Levy

Oral presentation

**Darling or Babygirl? Investigating Stylistic Bias in Sentiment Classification.** July 2018  
 5th Workshop on Fairness, Accountability, and Transparency in Machine Learning (FATML 2018)  
**JH. Shen\***, L. Fratafico\*, I. Rahwan, A. M. Rush  
 Oral presentation

**TuringBox: An Experimental Platform for the Evaluation of AI Systems** July 2018  
 5th Workshop on Fairness, Accountability, and Transparency in Machine Learning (FATML 2018)  
 Z. Epstein, B.H Payne, **JH. Shen**, C.J. Hong, B. Felbo, A. Dubey, M. Groh, N. Obradovich, M. Cebrian  
 I. Rahwan  
 Oral presentation

**Evolution of employment in the United States: a half-century of polarization** July 2018  
 4th International Conference on Computational Social Science  
**JH. Shen**, M. Frank, E.Moro, I. Rahwan  
 Extended abstract and contributed talk

**Detecting Anxiety through Reddit** July 2017  
 Proceedings of the Fourth Workshop on Computational Linguistics and Clinical Psychology  
**JH. Shen**, F. Rudzicz  
 Oral presentation

## TEACHING EXPERIENCE

---

**Teaching Assistant** Spring 2017  
 University of Toronto Department of Computer Science  
 Digital Systems and Computer Organization

## EMPLOYMENT EXPERIENCE

---

**Program Manager Intern** Summer 2015, Summer 2016, Summer 2017  
*Microsoft* *Seattle, USA*

- Conceptualized, designed and shipped full implementation of suggested groups interface and algorithm in Outlook Groups feature; worked closely with engineering, UI design, product marketing and user research teams to deliver full feature to production.
- Delivered prototype for integrating AI answer bot into the Outlook conversation experience powered by Bing NLP algorithms; developed vision with partner teams for overall bot integration strategy across all Outlook experiences.
- Worked on event sourcing database architecture features on CosmosDB noSQL database team in Azure Data Platform Group.

**Robotics Engineer** August 2015 – May 2016  
*Verity Studios* *Zürich, Switzerland*

- Designed, implemented and tested various drivers for autonomous quadcopter system including CRC, LED, Can Bus, EEPROM, IMUs and Bootloaders.
- Analyzed performance of embedded programs on TI microprocessor using advanced trace modules.
- Fabricated customized components to test various microprocessor integrated PCB units.
- Automated testing of embedded memory peripherals using relay components.

**Software Engineer** May 2014 – August 2014  
*Intel* *San Jose, USA*

- Designed algorithms and tools to support FPGA development: developed tool to automate flow of generating maps that connect physical circuit elements to software elements using python and eclipse.
- Wrote full documentation for tool and TCL scripts to simplify the operation of the tools.

## HONORS AND AWARDS

---

<b>Spirit of EngSci Award</b> Awarded for exemplary non-academic contributions within the University community.	October 2017
<b>C. William Daniel Leadership Award</b> Awarded for academic standing, leadership qualities, and community involvement.	October 2015
<b>AJB Software Kick-Start Award</b> Awarded for academic merit and entrepreneurial spirit.	October 2014
<b>Peter Sands Award in Engineering Science</b> Awarded for qualities of character, leadership, and commitment to profession of Engineering.	November 2014
<b>Class of 5T0 Engineering Leadership Award</b> Awarded for high academic performance, leadership potential, and volunteerism.	October 2013
<b>Center for International Experience Research Grant</b> Research grant for summer research project at National University of Singapore.	June 2013

## LEADERSHIP AND SERVICE

---

MIT Media Lab 'Meet the Lab' Organizer	2017-current
MIT Media Lab Deep Learning Reading Group Organizer	2017-current
Women in Machine Learning (WiML) Workshop Volunteer	2017, 2018
Engineering Science Student Society President	2016-2017
University of Toronto Engineering Policy Forum Founder	2016-2017
NSight Mentorship Program Director	2014-2015
Apassionata Music Group Director	2014-2015