

Rachel Reed

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Education

Stanford University

MS in Mechanical Engineering, Focus on Manufacturing & Product Realization

June 2019

Massachusetts Institute of Technology

B.S. in Mechanical Engineering, Minor in International Studies
Spanish Exchange Student-Instituto Internacional

June 2016
Major GPA: 4.8/5.0

Experience

Boat Design Challenge | Professor

Sole instructor running a joint MIT-SUTD boat design challenge where students built unique one man electric boats that traveled ~10 knots. Duties included designing curriculum, shop training, providing building expertise, and conducting design reviews.

Summer 2017

Toy Design | Lab Instructor

One of multiple instructors running a freshman toy design class at MIT. Duties ranged from lecturing, building a new lab space, running lab sections, and assisting teams in building a novel toy from ideation to alpha prototype.

Spring 2017

Product Engineering Process | Instructor

Assisted in the production of a hands-on educational experience in designing consumer products. 150 students participated in this iconic MIT mechanical engineering capstone class and presented in front of ~50k people at the end of the term.

Fall 2016

Ford Motor Company | Powertrain Installation Cooling Intern

Helped design a volume calculator used for determining Degas bottle sizing
Created a method for testing and analyzing hose compliance, finding a large discrepancy in actual and believed hose expansion

Summer 2015

MIT Lienhard Lab | Undergraduate Researcher

Used CFD to analyze natural convection flows to increase oxygen in fish farming ponds in underdeveloped regions
Built physical pool models to validate analytical results

Jan 2015-May 2016

Harvard Microrobotics Lab | Research Assistant

Designed and fabricated an air disturbance generator for Robobee robustness experiments to simulate varying gusts of wind

Summer 2013

Skills

Solidworks/CAD
CNC Machining
Injection Molding
Thermoforming
Rapid Prototyping
Illustrator/Premier
Javascript

Honors & Awards

LINC Conference Panelist (May 2016)
ESG Excellence in Teaching Award (May 2016)
MIT Korea Program Speaker (April 2016)
4th Place in International Design Competition & Most Creative Design (July 2015)
Office of Minority Education Distinguished Peer of the Month (November 2014)
Lime Connect Fellowship (August 2014)
Outstanding Contributions to ESG (May 2013)