

# Lisa Gardner

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## EDUCATION

**Stanford University** Stanford, CA Sept 2019 - present  
*Master's of Science in Mechanical Engineering* GPA: 4.1/4.3  
• Studying Mechatronics (ME 218 series) and Product Realization

**Massachusetts Institute of Technology** Cambridge, MA Feb 2019 - May 2019  
*Special Student Program* GPA: 5.0/5.0  
• Designed and manufactured 50 yo-yos and created a delta robot to complete a pizza challenge in team setting  
• Scaled early stage mechatronics education module as a Hardware Specialist in MIT d'Arbeloff Lab

**Pennsylvania State University | Schreyer Honors College**, University Park, PA Class of 2019  
*Bachelor of Science in Mechanical Engineering* Magna Cum Laude  
• Researched and wrote honors thesis: "Setting Guidelines for Creating STEM Products That Appeal to Young Girls"  
• Investigated post-harvest losses in produce in Kenya and traveled to Kisumu, Kenya for a three week immersive experience where my team interviewed farmers, transporters, and wholesalers to prototype our solution  
• Collaborated in a international team with students from Brigham Young University and the National University of Singapore to implement the design process on decreasing water usage and to complete a technical report

## RELEVANT PROFESSIONAL EXPERIENCE

**Product Realization Lab, Stanford University** Stanford, CA  
*Course Assistant* Sept 2020-present  
• Mentors students in small group coaching to help them design, CAD, and scale projects of their own creation  
• Empowers students to create their own products that are meaningful, manufacturable, and unique

**Bresslergroup** Philadelphia, PA  
*Junior Mechanical Engineer* June 2020-Aug 2020  
• Designed, quoted, prototyped, and assembled a mechanism for a client project in 3 weeks that involved mechatronic, CNCed, and 3D printed parts  
• Developed a mechanical enclosure for an internal electrical engineering board testing device  
• Focused on detailed design of mechanisms, tolerance stack-ups, DFM, and top-down modeling techniques

**Lyft - Level 5 (Autonomous Vehicle Division)** Palo Alto, CA  
*Design Engineering Intern - Exteriors Team* June 2019-Sep 2019  
• Designed, procured, and analyzed (using modal and dynamic analyses) a lidar mount on the car  
• Utilized master modeling techniques in Solidworks working from a top-level assembly  
• Performed GD&T, prototyped a jig for bracket installation, and notched the bracket to address a safety concern

**Newell Brands** Huntersville, NC  
*Design Engineering Intern* May 2018-Aug 2018  
• Designed and built a leak testing apparatus that held and rotated 15 pounds of weight, captured water droplets, and automated the recording process using 8020 Aluminum and Arduino  
• 3D modeled, costed, and tested the apparatus to verify that it made the process more efficient than the current testing

**Joulez Inc.** Boston, MA  
*Mechanical Engineering Product Design Intern* June 2017-Aug 2017  
• Conducted a design-thinking exploration of our target age group (girls, 8-12 years old) to help understand user needs  
• Prototyped the first product throughout the summer and conducted a user test with the Beta prototype for feedback

## VOLUNTEER AND LEADERSHIP EXPERIENCE

**Penn State Triathlon Club** University Park, PA  
*President (2017-2018)* Jan 2016-May 2019  
• Led a club of 40 active members and an executive board of 7 members; tripled membership from 10 to 30 in first month  
• Raced in the North Eastern Collegiate Triathlon Conference and raced at the national competition in April 2017 and 2018

**Bike and Build** Philadelphia, PA  
*Coastal Drift Rider* June 2016  
• Raised over \$3,000 for the affordable housing cause and biked from Bar Harbor to New York City to raise awareness

## SKILLS

*Hardware* - Mill, CNC Mill, Lathe, Injection Molding, 3D Printing, MIG Welding, Soldering, Water Jet, Laser Cutter, Thermoforming, Silicone Casting, Bronze Casting, Electrical & Software Engineering Integration  
*Software* - SolidWorks (Master Modeling, FEA), Creo, C++, C, MPLAB, uVision, Arduino, MATLAB, Fusion 360, Inventor, Adobe Creative Suite, Final Cut Pro