

Lara Zlokapa

Personal website: lara.z@berkeley.edu
<https://lara-z.github.io>
www.linkedin.com/in/lara-zlokapa
Berkeley, California, US



PERSONAL STATEMENT

I am passionate about innovative mechanical design that tangibly improves people's lives. A highly motivated team player and fast learner, I am eager to apply my engineering design, creative problem solving, and technical writing skills as well as my enthusiasm to empower others to live to their full potential.



EDUCATION

University of California, Berkeley

Aug. 2016 – May 2020 (Expected)

B.S., Mechanical Engineering

- GPA: 3.60/4.00
- Relevant Coursework: Engineering manufacturing and tolerancing; design of planar machinery; bioinspired design; engineering dynamics; mechanical behavior of engineering materials; fluid mechanics; solid mechanics; thermodynamics; circuit design; linear algebra; differential equations.



SPECIAL SKILLS

Design/Modeling: SolidWorks, AutoCAD, Rhino, 3D printing, dimensioning and tolerancing, machine shop skills (end mill, lathe, etc.), soldering, laser cutting, water jet cutting, laser scanning, Adobe Creative Suite.

Programming: MATLAB, Python, HTML, CSS.

Writing/Communication: Business plan author, essay-writing teacher (high school level), team policy debater.



TECHNICAL EXPERIENCE

Applied BioMechanics, Alameda Island, CA

May 2018 – Present

Engineering Associate in Accident Simulation Reconstruction

- Perform and process laser scans of sites, vehicles, and objects involved in accidents.
- 3D model sites and all components of accidents in Rhino for simulation.
- Analyze and reconstruct accident dynamics.

Human Powered Vehicles Club, UC Berkeley, CA

Member, Fairing Subteam

Aug. 2017 – Apr. 2018

- Designed, 3D modeled, and analyzed aerodynamics of tricycle fairing in SolidWorks and ANSYS in team of 5.
- Performed carbon fiber lay-ups to create frame and fairing of vehicle.
- Awards at ASME's E-Fest Human Powered Vehicle Challenge: 3rd place overall, 2nd place Design Award, and Craftsmanship Award out of 18 teams.

EnableTech, UC Berkeley, CA

Jan. 2018 – Present

Member, Gripper Project Team

- Designed and laser cut mechanical, cost-effective gripper in interdisciplinary team of 5 for need-knower without grip strength to pick up objects from floor and shelf.
- 3D modeled hand grip for device in SolidWorks.

Berkeley Emergent Space Tensegrities (BEST) Lab, UC Berkeley, CA

May 2017 – Oct. 2017

Research Intern

- Conceptualized progressive springs for 6-bar spherical tensegrity robot under Master of Eng. student.
- Designed, 3D modeled, 3D printed, and prototyped end caps with improved durability and frictionless cable movement for 6-bar spherical tensegrity robot for search and rescue and as rover for Jupiter's moon Titan.
- Produced end cap dimension drawings in AutoCAD.



LEADERSHIP & ACTIVITIES

Human Powered Vehicles Club, UC Berkeley, CA

Apr. 2018 – Present

Co-President

- Lead design of bike as well as all team meetings for 30-person club.
- Create club budget, manage club expenses, and collaborate with sponsors (such as General Motors or Ford).
- Organize, schedule, and follow up on all team activities (subteam progress, sponsor relations, outreach, etc.).