

OPTICS 110

Education

Master of Science, Applied Physics (Optical Materials and Devices) Expected Sept. 2018
University of Oregon

Bachelor of Science, Physics May 2017
Saint Mary's College of California

Academic Projects

Project Leader Mar. 2017-May 2017
Saint Mary's College of California Physics Dept., Prof. Chris Ray

- Initiated robotics project by approaching a professor and several students to begin researching designs.
- Researched and designed an autonomous glider using both LIDAR and thermal imaging technology by organizing weekly meetings to brainstorm and discuss project ideas.
- Researched LIDAR and cheaper alternatives as a method of obstacle avoidance that could be integrated into glider flight system.

Solar Regatta Event Participant May 6, 2017
Sacramento Municipal Utilities Board (SMUD)

- Designed and built a solar-powered boat with a team of students and a professor to race in the Annual Solar Regatta hosted by SMUD.
- Assumed a leadership role by actively organizing meetings, prioritizing and delegating tasks, and ensuring paperwork was signed and turned in on time.
- Maximized stability by utilizing MatLab to calculate necessary dimensions for expected weight and design.
- Incorporated cost-efficient and environmentally conscious materials by using recycled wood, a donated propeller, repurposed metal, and recycled paint.
- Designed and built a battery-pack that maximized power output while working within the limitations placed by SMUD.

Wind Turbine Apr. 2015-May 2015
Saint Mary's College of California Physics Dept., Prof. Chris Ray

- Designed and built wind turbine in 6 weeks that successfully charges a 12V battery as an individual project in a college course.
- Researched wind turbines and DIY turbines create a design based on available supplies.
- Converted a donated ceiling fan motor into a generator.
- Minimized cost and overall weight of the turbine by cutting the blades from PVC pipes.
- Presented final design and finished project to peers and professors.

Work Experience

Math and Physics Tutor Mar. 2015-May 2017
Saint Mary's College of California STEM Center

- Encouraged students to be excited about math and physics by having a positive attitude and patience when tutoring.

Intern

Jun. 2016-December 2017

Ittsē – Lafayette, CA

- Prepared and tracked inventory for hundreds of cosmetic products.
- Managed customer orders and packed shipments.

Volunteer Experience

Legacy Garden Volunteer

Mar. 2017-May 2017

Saint Mary's College of California

- Completed miscellaneous tasks to improve the conditions of the garden.
- Planted vegetables that would later be given to the campus dining hall to serve to students.

Stellium Event Volunteer

Music of the Spheres– Grace Cathedral, San Francisco, CA

Apr. 28, 2017

- Worked at a dinner event with the goal of fighting human trafficking by raising awareness and money through ticket and merchandise sales.
- Helped set up the event, serve food to over 50 people, and clean up after the festival.

Harm(onic) Reduction– Oakland, CA

Sept. 17, 2016

- Worked at a music festival to help fight human trafficking.
- Worked in teams to set up the event and manage merchandise tables.
- Updated and tracked payments.

Physics Outreach Program Volunteer

Sept. 2016-

May 2017

Saint Mary's College of California

- Represented the physics and engineering departments during events for prospective and admitted students.
- Was a panel member at multiple events for both current and prospective students.

Conferences

Conference for Undergraduate Women in Physics Participant

Jan. 15-17, 2016

American Physics Society – Oregon State University