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Current:
120 Highland Place
Ithaca, NY 14853-8703

EDUCATION

Cornell University, College of Arts and Sciences, Ithaca NY

B.A. Physics, Minors in Mechanical Engineering and Astronomy

Ithaca, NY
May 2018 (expected)

- GPA: 3.48/4.00
- Pauline and Irving Tanner Dean's Scholar
 - Awarded to top 5% of applicants in the College of Arts and Sciences

PROFESSIONAL EXPERIENCE

Honeybee Robotics

Mechanical Engineering Intern

Brooklyn, NY
May 2016 - August 2016

- Built and tested robotic systems for defense and industrial purposes while assisting with engineering space and medical systems
- Designed, built, and presented a stereoscopic vision system to the Department of Defense for a remotely operated ground vehicle (TALON) that granted the user the ability to view the vehicle's surroundings in 3D
- Improved the mechanical design of a pipe inspection robot to help it navigate and inspect pipes as small as two inches in diameter and demoed the technology to natural gas companies

LEADERSHIP AND RESEARCH EXPERIENCE

Cornell Mars Rover Project Team

Science Subteam Lead and former Mechanical Subteam Member

Ithaca, NY
September 2014 - Ongoing

- Competed in the annual University Rover Challenge in May, where teams complete a series of tasks in the Utah desert, which replicates a Martian environment
- Recruited and lead the Science Subteam in researching the environments of Utah and Mars as well as tested pH and humidity of soil samples in the Utah desert to search for signs of life and presented results to a panel of judges at competition
- Designed and constructed the drill system in Solidworks and integrate sensors and sample containment as a sophomore on the Tasks Subteam

Summer Undergraduate Research Fellowship

Incoming SURF Fellow

Pasadena, CA
June 2017 – August 2017

- Collaborate with mentor Dr. Paul Hayne at NASA Jet Propulsion Laboratory to better understand the Moon's geologic history by finding a correlation between regolith thickness and crater age
- Distinguish regolith from bedrock ejecta using Diviner thermal data, to quantify the amount of rocky ejecta around each crater, and compile statistics for each region of interest
- Will be submitting a technical paper and presenting my research at the end of the ten week program

Europa Clipper Trajectory Research

Student Researcher

Ithaca, NY
January 2017 – Ongoing

- Work with Dr. Alex Hayes in the Department of Astronomy on generating coverage maps using various possible trajectories for the upcoming Europa Clipper mission
- Plot radiation and spacecraft coverage potential on a map of Europa and analyze features of interests to make a list of possible landing sites

Arts & Sciences Ambassadors

Ambassador

Ithaca, NY
March 2016 - Ongoing

- Represent the College of Arts & Sciences at information sessions, receptions, one-on-one meetings, and other events with undergraduate and prospective students
- Work during Cornell Days and Diversity Hosting to accommodate prospective students and to communicate to them the experiences and opportunities presented through the College of Arts & Sciences and Cornell University as a whole

ADDITIONAL INFORMATION

Proficiencies: CAD, Solidworks, Autodesk Inventor, MatLab, Python, Machining, Java, ArcGIS, Microsoft Office Suite

Activities and Interests: Traveling, Alpha Chi Sigma, linguistics, astronomy, fencing