Marilyn Wolbert

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OBJECTIVE

Fourth year Mechanical/Aerospace Engineering major seeking co-op/internship opportunities for Summer 2021, or full time opportunities starting Summer 2022.

EDUCATION

Rochester Institute of Technology
Bachelor of Science in Mechanical Engineering, Expected May 2022
Minors in Italian and ASL

SKILLS

Siemens NX, PTC Creo, SolidWorks, AutoCAD, Labview, MATLAB, Python, Microsoft Office Suite, General Manufacturing Shop Skills
Italian, American Sign Language, Basic Mandarin

WORK EXPERIENCE

Apple, Inc. Product Design Engineering Co-Op, *Cupertino, CA* Sept 2019 - Current
Worked as a product design engineer on the Mac team for Mac Mini. Used CAD software to create/edit parts and subsets of the system in 3D and 2D modeling. Worked with vendors in region and remotely to assist in builds, engineering edits, and manufacturing learnings. Performed testing and worked with cross-functional teams to create mock systems for advanced testing procedures.

Optel, Inc. Product Design Engineering Co-Op, *Rochester, NY* May 2019 - Sept 2019
Visualized, designed and coded Raspberry Pi-based camera system for telescopes and microscopes. SolidWorks, Python, Raspbian and 3D printing experience were necessary/enhanced from this co-op experience.

PCC Structurals, Process Engineering Co-Op, *Groton, CT* June 2018 - January 2019
Worked in the back end of an aerospace castparts manufacturing facility in optimization of the assembly line and current processes. I developed and pushed new back-end layouts by using data analysis to assess product flow and weak points in the original set up. I also headed a plant-wide 6S initiative to improve safety, plant organization, and daily reporting.

PROJECTS

Designing Space Craft for the Removal of Excess Space Debris, *MyNightSky Project*
MyNightSky is a start-up company working to aid in the removal of space debris through the design and manufacturing of a fully functional satellite. MyNightSky is working with RIT's college of business as well as the university's CapStone and MSD programs.

Astrophotography Axial Camera Mount, *RIT SPEX*
Built a mount that holds a DSLR camera at a starting angle parallel to the horizon. A stepper motor was mounted on to the bottom of two adjacent plates, and using two Arduinos and the corresponding code—the plates open at the rate of the earth's rotation in order to take 90s-exposure photos of the night sky.

Motorized Telescope Mount, *RIT SPEX*
Alongside a team, we created a Dobsonian telescope mount for our small Orion telescope. The mount could rotate along both axes. It also provided opportunity to apply prior telescope automation code created previously for our 12" Meade telescope.

Communication through Multi-Functional Antennae, *RIT SPEX*
Built both Folded Dipole and Helical Antennae to establish communications with broadcasts from NOAA weather satellites to receive live weather data. Signals are received through Automatic Picture Transmission and compared between the two different types of antennae.

ACTIVITIES

RIT Space Exploration (RIT SPEX)
Technical Coordinator
The position works closely with each project group within RIT Space Exploration, in the design, analysis, and manufacturing follow-through of each project and its respective students.
Astrodynamics Team Lead
As a team lead I facilitated and contributed to multiple projects that took place in the 2017-2018 school year. Projects related to astrophysics, mathematics, and engineering skill sets, as well as overall astrophysical telescope research and observing.

New Student Orientation(RIT NSO)
Orientation Leader
Responsible for effectively establishing connections and communications between new students, families, and campus life by guiding a group of 15-20 new students for a week before fall classes start.
Orientation Supervisor
In charge of training incoming orientation leaders and facilitating all Orientation activities once training commences.

Student-Run Newspaper (Reporter)
Section Editor
Responsible for creating content and editing the content created by other students for RIT's Reporter magazine.

COURSEWORK

• Boundary Value Problems • Fluid Mechanics I • Numerical Methods • Applied Entrepreneurship • Beginning ASL I, II • Differential Equations • Thermodynamics I • Strengths of Materials and Lab • Engineering Measurements Lab • Manufacturing and Supply Chain • Multivariable Calculus • Statics • Product Innovation • Project-Based Calculus I, II • Materials Science and Lab • Italian I, II, III, IV