**Hugo Hawk**

New Paltz, NY

555-555-8675 | hawkh@newpaltz.edu

**Education**

**State University of New York at New Paltz**

*Bachelor of Science in Mechanical Engineering* Expected May 2023

Cumulative GPA: 3.87/4.00

Dean’s List (7/8 semesters)

**Skills**

SOLIDWORKS, MATLAB, ANSYS, EES, Microsoft Office, Google Workspace

**Work Experience**

 **Technical Intern – PSEG Long Island,** *Hicksville, NY* June 2022 – Aug 2022

* Worked in Substation Maintenance and Relay Protection group
* Travelled to substations with first level supervisors to observe management of workers and engaged in the assessment and evaluation of machinery used at each substation
* Edited and developed documents for Substation Maintenance Training Academy Manual
* Completed required substation, underground, and overhead training to access various job facilities

**Project Experience**

**Refrigeration Cycle for Tropical Country,** *SUNY New Paltz*  Fall 2022

* Designed simple vapor compression cycle, cascade cycle, and two-stage cycle for food storage refrigerator for Peru using an environmentally friendly working fluid, R290, Propane.
* Calculated required cooling load using heat capacities of food typically found in Peru.
* Thermodynamic property values were found using Cool Prop add in for MATLAB, EES, Excel and were verified against hand calculations.

Used EES to perform parametric analysis on the effects of pressure/temperature on efficiency/cooling power.

* Selected optimal cycle design by calculating and comparing cost analysis, cooling power, and efficiency.

**Reverse Engineered a Rubber Band Powered Car,** *SUNY New Paltz* Spring 2022

* Team constructed and designed a 3D printed rubber band powered car leveraging an existing model.
* Used SOLIDWORKS to model chassis, wheels, drive train, drive shaft to be 3D printed.
* Cars were assembled and tested for max distance traveled and velocity as well as minimized weight and cost.
* Used original prototypes to collect and analyze data; design was then updated to improve performance.
* Finished 1st out of 12 teams competing in a final performance competition measured against distance and cost.

**Truss Bridge, Statics,** *SUNY New Paltz* Fall 2021

* Utilized knowledge of statics and truss bridge design to develop and construct the strongest possible bridge.
* Used SOLIDWORKS to design the bridge CAD model that was 3D printed.
* Tested the 3D printed bridge with a press machine to calculate max load.
* Used MATLAB, EES, Excel and hand calculations to find internal forces of each member due to the applied load using the method of joints.

**Active Member**

* Women in Science and Engineering
* American Society for Mechanical Engineers
* Campus Representative, Hippies for Hope