# **Jackson Wills**

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#### **EDUCATION**

Gonzaga University Graduate May 2020

Bachelor of Science, Mechanical Engineering

- GPA 3.78
- Will take the FE Exam when testing centers reopen

### **University of Minnesota**

Beginning August 2020

PhD Student, Mechanical Engineering

**SKILLS** 

System Modeling Julia Language MATLAB

SolidWorks LabVIEW LaTeX

Machine Shop Desire and Aptitude for Learning Personal and Communication Skills

### **ACADEMIC PROJECTS**

**Furuta Pendulum** 

November 2019 - May 2020

 Worked in Dr. Fitzgerald 's lab at Gonzaga University to better understand underactuated control by analyzing a rotary inverted pendulum.

## **Solid Adsorption Refrigeration**

August 2019 - March 2020

• Designed and prototyped a solar radiation powered refrigeration system for use in health clinics in developing countries. Designed for cost under \$2000.

Biology Research April 2017– June 2017

 Conducted research on insect biodiversity in Terra-Firma and Varzea ecosystems in the Amazon Rainforest

#### **3D Printed SolidWorks Design**

September 2017 – December 2017

Designed and printed a 5-inch Pixar Animation character. Reduced infill percentage to 18%

### **WORK EXPERIENCE**

# FireFly Automatix

May 2019 – August 2019

Mechanical Engineering Intern | Salt Lake City, Utah

- Worked to optimize manufacturing efficiency and modeled parts in SolidWorks.
- Operated machinery in the machine shop, gained understanding of the production process.

### **Gonzaga University**

August 2018 - December 2019

Manufacturing Processes Lab TA and Physics Lab TA | Spokane, Washington

- Graded lab reports and answered any conceptual and procedural questions that arise during lab
- Directed students in hands-on labs

### **NorthStar Builder's General Contractors**

July 2018 - August 2018

General laborer | Salt Lake City, Utah

 Assisted specialists within various construction jobs including, sprinkler system installation and electrical wiring

#### **RELEVANT COURSEWORK**

System Dynamics and Controls Circuits Computational Dynamics

Mechanical Design Vibration Engineering Biomechanical Engineering

### **LEADERSHIP AND SERVICE**

### **Science In Action!**

September 2018 – December 2019

• Developed and implemented a science-based curriculum in low income elementary schools

## **Ignite Basketball Association**

October 2018 - December 2019

• Instilled team work skills to low income youth in a local basketball league

### **Meals on Wheels**

February 2019 - May 2019

 Preserved the dignity and independence of disabled or home bound seniors in Spokane by providing them with nutritious meals

#### S.M.I.L.E.

January 2018 - May 2018

• Developed an ability to think on my feet while mentoring youth at low income schools in an afterschool program