# ∨ W. Hoeper

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## Education

#### **Oregon State University**

Sept. 2015 - PRESENT

MECHANICAL ENGINEERING - SENIOR

- · GPA: 3.90 (3.95 Major)
- Expected Gradution: June 2018
- · Minor in Aerospace Engineering

# Skills\_

**Programming** Proficient in MATLAB, LaTeX, Arduino, VBA

Software

Solidworks, Engineer Equation Solver, Microsoft Office Suite, Microsoft Project

Machine Shop Experience

Oregon State's Machine and Product Realization Lab (End Mill, Lathe, CNC Mill)

# Educational Activity \_

#### Oregon State Intercollegiate Rocket Engineering Competition Team (IREC)

Oct. 2015 - PRESENT

PROPULSION SUB TEAM LEAD FOR 2018 TEAM

- · Aided in the process of mixing and packing the propellant. Which resulted in a greater understanding of how solid rocket motors function.
- Assisted structural sub team in carbon fiber layups and testing. Resulted in a greater knowledge of composite manufacturing.
- · Various aspects of the rocket lead to experience with layups for pre-preg carbon fiber, fiberglass and kevlar.

#### **Oregon State High Altitude Rocket Team**

MEMBER

Sept. 2016 - PRESENT

- Assisted propulsion team with manufacturing of the solid rocket motor assembly.
- · Designed and built a wireless ignition system for solid rocket motor. Utilizes two arduinos paired via radio.

#### The American Institute of Aeronautics and Astronautics (AIAA)

Sept. 2016 - June 2017

HEAD OF PUBLIC RELATIONS

- Reaches out to companies to organize tours or to ask distinguished people to give guest lectures.
- · Assists in community outreach events that pertain to IREC, Hybrid Rocket, or AIAA in general.
- · Generates interest for the club for both prospective students and for the administration of OSU by being a public figure.
- Member of the National AIAA Organization since Oct. 2015.

# **Work Experience**

### **Oregon State Propulsion Laboratory**

Corvallis, OR

RESEARCH ASSISTANT

Feb. - June 2017, Sept. 2017 - Present

- · Works alongside graduate student mentor as apart of a thesis project on a pulse detonation engine (PDE).
- Prepares PDE for testing by placing necessary gas tanks, calibrating pressure transducers, and operating LabView.
- Designs and or fabricates various components necessary to the project.

#### **Innovative Composite Engineering**

ENGINEERING INTERN

• Created data collection system to monitor scrap and defect data for a specific product.

June 2017 - Sept. 2017

- · Worked to develop methods to minimize scrap; focused on a specific product but applied to all parts.
- Conducted final inspections and first article inspections for a plethora of parts using a coordinate measuring machine to check for conformance.
- Supported and worked with other engineers to assist on various projects when manpower was needed.

# References\_

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John Roberts **Quality Engineer** Innovative Composite Engineering johnr@innce.com 509.493.4484