

# Matthew W. Hoeper

MECHANICAL ENGINEERING STUDENT

☎ (541) 973-3234 | ✉ mhoeper@purdue.edu | 🌐 Website: 🏠 mahoeper.github.io | 🐙 Github: 📁 mahoeper | 🔗 LinkedIn: 📄 hoepermm

## Education

### Purdue University

M.S./PHD OF MECHANICAL ENGINEERING

- Meyer Research Group at Zucrow Laboratories

West Lafayette, Indiana

Aug. 2018 - PRESENT

### Oregon State University

B.S. OF MECHANICAL ENGINEERING

- GPA: 3.90 (3.95 Major)
- Graduation: June 2018 with Summa Cum Laude

Corvallis, Oregon

Sept. 2015 - June. 2018

## Skills

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

**Software** Solidworks, EdgeCam, ANSYS, Microsoft Office Suite, Microsoft Project

**Machine Shop Experience** Oregon State's Machine and Product Realization Lab

## Educational Activity

### Oregon State ESRA/IREC Competition Rocket

PROPULSION SUB TEAM LEAD FOR 2018 TEAM

- Propulsion Team lead for the 2018 competition team. Working to design and build a solid rocket motor that can take a vehicle to 30,000 ft.
- Aided in the process of mixing and packing solid 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.
- Worked alongside 17 others on the team to create a very well engineered rocket.

Corvallis, Oregon

Oct. 2015 - July 2018

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

HEAD OF PUBLIC RELATIONS

- Reached out to companies to organize tours or to ask distinguished people to give guest lectures.
- Assisted in community outreach events that pertain to ESRA, or AIAA in general.
- Generated 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.

Corvallis, Oregon

Sept. 2016 - June 2017

## Work Experience

### Oregon State Propulsion Laboratory

RESEARCH ASSISTANT

- 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.
- Worked on a research project on energetic materials.

Corvallis, OR

Feb. - June 2017, Sept. 2017 - July 2018

### Innovative Composite Engineering (ICE)

ENGINEERING INTERN

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

White Salmon, WA

June 2017 - Sept. 2017

## References

Nancy Squires  
Senior Instructor  
Faculty Advisor of OSU AIAA  
squiresn@engr.orst.edu  
541.737.2337

David Blunck  
Assistant Professor  
PI of Propulsion Laboratory  
David.Blunck@oregonstate.edu  
541.737.7095

Terrence Meyer  
Research Professor  
Zucrow Laboratories  
Purdue University  
trmeyer@purdue.edu