

Matthew W. Hoeper

MECHANICAL ENGINEERING STUDENT

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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

Corvallis, Oregon

Oct. 2015 - July 2018

- 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.

The American Institute of Aeronautics and Astronautics (AIAA)

HEAD OF PUBLIC RELATIONS

Corvallis, Oregon

Sept. 2016 - June 2017

- Reaches out to companies to organize tours or to ask distinguished people to give guest lectures.
- Assists in community outreach events that pertain to ESRA, 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

RESEARCH ASSISTANT

Corvallis, OR

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

- 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.

Innovative Composite Engineering (ICE)

ENGINEERING INTERN

White Salmon, WA

June 2017 - Sept. 2017

- 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.

References

Nancy Squires
Senior Instructor
Faculty Advisor of OSU AIAA
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David Blunck
Assistant Professor
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