

# COLE DOMENICO

Portland, OR — Portfolio: [colesprojects.com](http://colesprojects.com)  
(503)-280-0957 — [cole.domenico1997@gmail.com](mailto:cole.domenico1997@gmail.com)

## EDUCATION

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### Oregon State University

BS: Mechanical Engineering

*September 2020*

*Cumulative GPA: 3.54*

### Specialized Coursework

*Major GPA: 3.65*

- Applied Heat Transfer
- Gas Dynamics
- Thermodynamic Design
- Vibrations

### Senior Design Project

*July 2019 — July 2020*

**OSU AIAA Experimental Sounding Rocketry Association (ESRA) Team** [projects/esra](http://projects/esra)

Designed and built a solid-propellant rocket that reached an altitude of 29,038 feet as a part of the collaborative, interdisciplinary ESRA team. As the propulsion team lead, my contributions and achievements were:

- Led a team of three other members to develop and design a reliable propulsion system.
- Characterized a new propellant formulation in sub-scale testing.
- Designed, built, and tested a data acquisition system on a critical timeline for sub-scale and full-scale static fire testing.
- Redesigned a motor assembly to minimize convection between pressure vessel and thermal liner.
- Reliably manufactured propellant grains for static fire testing and flight.

## WORK EXPERIENCE

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### Johnson Crushers International — MECOP Internship

*April — September 2019*

#### Plant Design Engineering

*Eugene, Oregon*

- Analyzed flexural and rigid body modes of vibration using sensors and FEA tools.
- Designed production parts and created CAD models and drawings for manufacturing.
- Designed and certified a Below the Hook (BTH) tooling fixture.
- Worked hands-on designing hydraulic power systems.
- Programmed engineering automation tools with Visual Basic for Inventor.

### Daimler — MECOP Internship

*April — September 2018*

#### Product Validation – Fuel Economy

*Portland, Oregon*

- Designed, built and tested a system to autonomously adjust trailer weight distribution for fuel economy testing using Python.
- Fabricated and tested diesel flow meters for measuring fuel consumption of trucks during tests.
- Designed parts for testing equipment using Siemens NX.

## SKILLS & CERTIFICATIONS

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### Proficient

- Passed Mechanical FE Exam
- Python
- C++
- Solidworks
- Inventor
- Eagle
- Matlab
- Engineering Equation Solver
- $\LaTeX$
- High power rocketry certification L2
- MS Suite

### Experienced

- Femap
- Siemens NX
- LabVIEW
- Simulink
- LTspice
- VBA
- Linux Bash Terminal
- HTML
- CSS
- Machining
- MS Project