# **Kacie Salmon**

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#### **EDUCATION**

Washington State University Pullman, WA

B.S. Mechanical Engineering

Expected Graduation Date: May 2019

Overall GPA: 3.99

### **EXPERIENCE**

Electro-Optical Civil Space Intern, Raytheon Space and Airborne Systems, El Segundo, CA Summer 2018

- Conducted thermal cycling and optical testing on JPSS 3,4 VIIRS optical assemblies.
  - Wrote and revised test procedures, handled hardware installation and experimental setup, ran test procedures, and organized data for analysis. Aligned autocollimators.
  - o Prepared and assisted in Consent to Proceed, Consent to Break, and Engineering Failure Reviews.
- Assisted in assembly and alignment of inline compact cryocooler.

## Lab Technical Assistant, Dr. Leachman's WSU Hyper Lab, Pullman, WA

2015-Present

- Continuous design work on lab space improvement, i.e. assembling LEAN benches and creating lab safety and lab themed (HYPER Games) posters.
- Conducted research on 3D printed reinforced polymer tensile testing at cryogenic temperatures; developed load machine cryostat, conducted testing using LN2, and found increased yield strength at cryogenic temperatures.

# STEM Summer Camp Counselor, Spokane Public Schools, Spokane, WA

Summer 2016

• Taught week-long summer courses to children K-3 about wearable electronics.

#### **LEADERSHIP**

### WSU PNW-LSAMP Mentor

August 2016 - May 2017

- Mentored freshman minority students in STEM majors.
- Offered services to mentored students such as tutoring and scholarship assistance.

### **WSU Cougs in Space President**

August 2016- May 2017

- Wrote an accepted WSU cubesat proposal for NASA's Cubesat Launch Initiative with an advising professor and group of five students.
- Founded the Cougs in Space club to organize the cubesat project in January 2017.

### **SKILLS**

Experience with designing small scale cryostats and handling of liquid nitrogen.

Familiar with testing within and operating large scale thermal vacuum chambers.

Competent with MATLAB, Solidworks Modeling and Analysis - CFD and FEA, and EES.

Experience with **fabrication** for research as well as Bosch assembly.

Experimental experience with thermocouples, strain gages and extensometers. Also,

**FDM 3D Printing** experience with a Felix Pro 3D printer using reinforced thermoplastics.

Relevant Courses Taken: Fundamentals of Thermodynamics, Fluid Mechanics, Dynamics

## AWARDS AND HONORS

Boeing Outstanding Senior, 2018

Auvil Fellowship, 2018

Pacific Northwest Aerospace Alliance Scholarship, 2018

WSU Outstanding Junior and Sophomore in Mechanical Engineering, 2016/2017

WSU Regents Scholar, 2015

### **ACTIVITIES**

Society of Women Engineers 2016-Present Tau Beta Pi 2017-Present