

Paige F. Cooley

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EDUCATION

- University of Michigan**, Ann Arbor, MI
Department of Climate and Space Sciences and Engineering
Master of Engineering, Space Engineering *December 2020*
- University of North Dakota**, Grand Forks, ND *May 2019*
BS, Mechanical Engineering
- Principia College**, Elmhurst, IL *May 2019*
BS, Engineering Science

PROFESSIONAL EXPERIENCE

- ATLAS Space Operations**, Traverse City, MI *February 2022 - Present*
Customer Success Engineer
- Proactively collaborates with ATLAS technical teams to advance current Ground Software as a Service (GSaaS) capabilities, advocates for network development based on customer needs, and directs design of tailored RF engineering solutions.
 - Communicates technical capabilities fluently internally and with clients, demonstrates technical features of ATLAS products, and bridges gap between Sales and Operations teams within ATLAS.
- Technical Sales Engineer* *October 2021 – February 2022*
- Advanced relationships with new and existing clients through effective communication of ATLAS' specialized products and services while supporting solution development through contracting.
 - Composed government and commercial proposals in a fast-paced environment with competing deadlines.
- NASA Jet Propulsion Laboratory**, Pasadena CA *May 2020 – August 2020*
System Verification and Validation Engineering Intern (313C)
- Devised and implemented a framework for verifying and validating all instrument-level requirements for suite of nine science instruments onboard Europa Clipper orbiter.
 - Coordinated with nine instrument engineers across disciplines to compose and evaluate complete set of tests to be performed that ensures compliance with science and mission objectives.
- NASA Jet Propulsion Laboratory**, Pasadena CA *June 2019 – August 2019*
Project Systems Engineering Intern (312A)
- Researched and informed mission architecture formulation decisions. Connected with study team and subsystem experts to prepare and maintain Master Equipment List.
 - Designed end-to-end data flow and telecom configuration diagrams for Europa Clipper System Testbed.
 - Audited 125 Mars 2020 Fault Protection Verification Items (VIs) and Verification Activities (VAs), interpreted results to ensure technical soundness and documentation completeness.

NASA Jet Propulsion Laboratory, Pasadena CA
Mars 2020 Flight System Systems Engineering and V&V Intern (312E)

June 2018 – August 2018

- Authored and executed procedures and VAs in jupyter notebook and the testbed to verify Mars 2020 mission spacecraft modes and configuration requirements.
- Documented test results, investigated anomalies, and effectively presented evidence for data reviews.
- Developed metrics deliverables displaying the state of all VIs, validated supplementary materials, and inspected flight software to build VI closure packages.

Principia College, Elsah IL
Mechanical Engineering Teaching Assistant

August 2017 – May 2018

- Mentored 15 students in core engineering courses to improve their academic performance. Provided weekly individual instruction while identifying areas for curriculum development.

PROJECT EXPERIENCE

Mars Radio Occultation (MARiO) Small Satellite Design Project
University of Michigan, Ann Arbor MI

September 2019 – April 2020

- Collaborated with 8-person team to formulate small-satellite mission architecture within the NASA Discovery Program, given constraints by stakeholders at NASA JPL.
- Championed research and development effort on structural and electrical power subsystem design.

Gannet UAS Senior Design Project
Principia College, Elsah IL

August 2018 – May 2019

- Collaborated with project team to develop a rapid deployable air and water unmanned vehicle.
- Led effort to adjust prototype design to support integration of an onboard autopilot system.
- Utilized Gazebo 3D simulation environment to conduct flight tests and assess aerial system performance.

PUBLICATIONS

Jones-Wilson, Laura; **Cooley, Paige**; Ralph, Alyssa; Largaespada, Raul; Lee, Dennis, “Europa Clipper Payload Verification and Validation: Test and Analysis Program Design,” *Proceedings of the IEEE Aerospace Conference*, Big Sky, MT, Mar 5 – 12, 2022.

Jones-Wilson, Laura; **Cooley, Paige**; Benitez, Veronica; Jackson, Maddalena; Srivastava, Priyanka, “Europa Clipper Payload Verification and Validation: Early Architecture and Implementation,” *Proceedings of the IEEE Aerospace Conference*, Big Sky, MT, Mar 6 – 13, 2021.

Hofgartner, J., Choukroun, M., Cable, M., Brophy, J., Carpenter, K., Casillas, R., Chmielewski, A., **Cooley, P.**, et al. (2019). *Feasibility of a Mission to Enceladus’ Subsurface Ocean for the Next Planetary Science Decadal Survey*. Abstract 2019AGUFM.P34C-06H American Geophysical Union (AGU) Fall Meeting, San Francisco, CA.

AWARDS

Climate and Space Sciences and Engineering Dean's Fellowship, *University of Michigan*, 2020 – 2021

Summa Cum Laude Honors, Master of Engineering, *University of Michigan*, 2020

Physical Science Award, *Principia College*, 2019

Trustee's Scholarship Recipient, *Principia College*, 2015 – 2019

Howard L. Mitchell Award for Athletic Excellence, *Principia College*, 2019

LEADERSHIP

MARiO Mission Structural and Electrical Power Subsystems Lead, *University of Michigan*, 2020

Leadership Certificate Recipient with distinction, *Principia College*, 2019

Student Body President, *Principia College*, 2018 – 2019

Dormitory President, *Principia College*, January 2018 – May 2018

Director of Operations, *Principia College Public Affairs Conference*, 2017 – 2019

Women's Tennis Team Captain, *Principia College*, 2016 - 2019