PARIS BUEDEL

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Thermal Engineer working in the aerospace industry. Demonstrated experience in analysis, design, integration, and testing of aerospace hardware. I have built a strong record of managing thermal systems across a broad array of spaceflight programs.

Professional Experience

Laboratory for Atmospheric and Space Physics (LASP) **Fall 2020 – Present**

While working as a **Thermal Engineer** at LASP, I have been a part of 15 programs, 11 of which I have been the Lead Thermal Engineer. Past and current work includes designing instruments and spacecraft for sounding rockets, low Earth orbit, the lunar surface, deep space, and interplanetary missions.

CU Boulder Dispersive Hydrodynamics Lab **Fall 2019 – Spring 2021**

As a **Fluid Systems Engineer**, I designed a recirculating water table to study dispersive shock waves generated by airfoils in shallow supercritical water flow, designed an optical data gathering and processing system for experiments, and used novel FEM solvers to study ongoing projects in the lab.

Engineering and Technical Skills

- Demonstrated expertise in NASA policies and procedures, ensuring compliance with standards and guidelines.
- Collaborated with government, industry, and foreign partners in conducting design reviews.
- Experienced in passive and active thermal control and hardware, ensuring optimal performance and reliability.
- Understanding of end-to-end spacecraft thermal analysis, from proposal to successful mission completion.
- Multiphysics analysis, integrating thermal analysis with electrical, optical, and structural analysis.
- Planned and executed thermal vacuum tests, validating spacecraft thermal management systems.
- Designed and fabricated MLI to maintain spacecraft thermal stability.
- Designed and analyzed GSE to support spacecraft assembly, integration, and testing.

Software Skills

- Thermal Desktop
- Ansys
- Radian
- FEMAP
- SolidWorks
- AutoCAD
- MATLAB
- FORTRAN
- C++
- Python
- LabVIEW
- EES

Education

University of Colorado at Boulder, College of Engineering & Applied Sciences **Class of 2021**

- B.S. Mechanical Engineering
- Energy Engineering Minor, Chinese Minor, Leadership Minor
- Presidents Leadership Class Scholar

Jiao Tong University, Shanghai, China **Spring 2018**

- Attended engineering academic semester abroad, studying materials science, solid mechanics, dynamics, and vibration analysis
- Passed the Chinese HSK Level 5 Exam (out of 6 levels)
- Scored Advanced Mid on the Chinese Oral Proficiency Interview (OPI)

Hobbies

Rock climbing, hiking, cycling, camping, cooking, baking, and studying languages (Chinese and French; learning German)