Jeremiah Munson

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SKILLS

- Systems Engineering
- Project Management
- Documentation
- Systems Tool Kit (STK)
- Physics, Math, & CS
- Python, C/C++
- Interdisciplinary Work
- Self-Directed Learning
- French

EDUCATION

M.S. in Aerospace Engineering Science — May, 2021

University of Colorado at Boulder, Boulder, CO

- Focus Area: Astrodynamics and Satellite Navigation
- Courses: Spaceflight Dynamics, Introduction to GNSS, Aerospace Math (Tensors)

B.A. in Physics, *magna cum laude* (3.86/4.00 GPA) — May, 2019

Carthage College, Kenosha, WI

- Notable Courses Outside Major: Software Development, Data Structures, Complex Variables, Calculus III, Math Methods, Advanced French, Public Speaking, and Intro to Public Policy among others.
- Carthage Space Sciences, Comp Sci Club, Society of Physics Students, Phi Kappa Sigma, Concert/Pep Band

EXPERIENCE

June 2016 – May 2019

Systems Engineer: CaNOP CubeSat

Wisconsin Space Grant Consortium, Carthage College: Kenosha, WI

- Orchestrated up to 20 students in subsystem teams ensuring collaboration. Led system requirement, design, and hardware integration.
- Organized and led weekly, full team meetings covering individual subsystem progress and next steps.
- Led the creation and organization of mission documentation including the Conceptual Design Review, System Requirements Review (SRR), Preliminary Design Review (PDR), and Critical Design Review (CDR). The SRR, PDR, and CDR were created as presentations and were presented to NASA employees.
- Performed mission simulations with Systems Tool Kit (STK) including power simulations, link coverage, and target imaging coverage.

June 2018 – August 2018

NASA Space Academy Research Associate: CubeSat Design and Engineering Model

NASA John H. Glenn Research Center: Cleveland, OH

- Defined high altitude ballon mission to advance the Technology Readiness Level (TRL) of an experimental, nano-enhanced satellite power system created at the Rochester Institute of Technology.
- Designed, assembled, and tested payload electronics around an Arduino Uno with custom Arduino shield and BeagleBone Black to cycle experimental batteries during flight.
- Launched high altitude balloon experiment and analyzed recovered data using Python.

December 2016 – April 2017

Power System Lead: Carthage College Future Vehicle Design Team

Carthage College, NASA Glenn Research Center Design Competition

- Responsible for the power system doing the power analyses and simulations. Researched different batteries and environmentally friendly energy sources to accommodate the "green" nature of the competition.

ADDITIONAL INFORMATION

Achievements/ Honor Societies

Sigma Pi Sigma Physics Honor Society:	Inducted May 2019
NASA Academy Alumni Association (NAAA):	Inducted August 2018
MadHacks Mini Hackathon Security and Privacy Category Winner:	April 2018
Carthage College Outstanding Physics Student Award (2016-2017):	May 2017
Systems Tool Kit (STK) Level 1 Certified:	July 2016
Eagle Scout:	November 2015

Select Presentations

Undergraduate Senior Thesis Defense:	May 2019
NASA Glenn Research Center Summer Interns Poster Session:	July 2018
CubeSat Developers Workshop:	April-May 2018
American Society for Gravitational and Space Research Conference:	October 2017
Wisconsin Space Grant Consortium Conference:	August 2016