Jeremiah Munson

jeremiahmunson.github.io

in www.linkedin.com/in/jeremiah-munson

https://github.com/JeremiahMunson

SKILLS

- Systems Engineering
- Project Management
- Documentation

- Systems Tool Kit (STK)
- · Python, Ruby, C/C++
- Basic Electronics

- Interdisciplinary Teamwork
- French

EDUCATION

2015 - 2019 (Anticipated)

Bachelor of Arts in Physics

Department of Physics and Astronomy, Carthage College

- Satellite Systems Engineering (Ind. Study), E&M, Mechanics, Computational Physics, Experimental Physics, Thermodynamics, Complex Variables, Math Methods, Multivariate Calculus, Diff. Eq., Linear Algebra, Data Structures & Algorithms, and Software Design & Development
- Space Sciences, Society of Physics Students, Comp Sci Club, Phi Kappa Sigma, Concert Band, Pep Band
- GPA: 3.84, GPA in Major: 3.89 on unweighted 4.00 scale

EXPERIENCE

CARTHAGE

June 2016 – present

Systems Engineer: CaNOP CubeSat

Wisconsin Space Grant Consortium, Carthage College: Kenosha, WI



- Orchestrate up to approximately 20 students in subsystem teams ensuring collaboration in producing accurate documentation and the successful integrated operation of the flight hardware.
- Led completion of Conceptual Design Review (CoDR), System Requirements Review (SRR), Preliminary Design Review, and Critical Design Review (CDR) for NASA. Co-presented PDR and CDR to NASA employees. Performed mission simulations with Systems Tool Kit (STK) including power simulations.

June 2018 – August 2018

NASA Space Academy Research Associate: CubeSat Design and Engineering Model

NASA John H. Glenn Research Center: Cleveland, OH

- Defined CubeSat and High Altitude Ballon missions to advance the Technology Readiness Level (TRL) of experimental, nano-enhanced satellite power system created by the Rochester Institute of Technology.
- Launched High Altitude Balloon (HAB) experiment. Designed, Assembled, and Tested payload electronics around an Arduino Uno microcontroller and Arduino shield to cycle experimental batteries during flight. Utilized a BeagleBone Black to assist data storage and transmission.

December 2016 -

Power System Lead: Carthage College Future Vehicle Design Team

April 2017 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.

July 2014 – May 2015

Nanotechnology Intern

Rushford Conductive NanoFiber/Rushford NanoElectroChemistry Co.: Rushford, MN

 Assembled impedance meters, researched applications of multi-walled carbon nanotubes, and assisted with pulse electrochemical machining with nanometer precision. Learned about multi-walled and single-walled carbon nanotubes and graphene and learned the basics of LabView.

ADDITIONAL INFORMATION

Achievements

Dean's List: Fall 2015, Spring 2016, Fall 2016, Spring 2017, Fall 2017, Spring 2018 **MadHacks Mini Hackathon Security and Privacy Category Winner:** April 2018



Carthage College Outstanding Physics Student Award: 2016-2017 Academic School Year

Systems Tool Kit (STK) Level 1 Certified: July 2016

Eagle Scout: November 2015

Presentations

NASA Glenn Research Center Summer Interns Poster Session: July 2018

CubeSat Developers Workshop: April-May 2018 Carthage College Celebration of Scholars: April 2018

American Society for Gravitational and Space Research Conference: October 2017

Wisconsin Space Grant Consortium Conference: August 2016

Professional Organizations

NASA Academy Alumni Association (NAAA): August 2018 - Present

American Society for Gravitational and Space Research (ASGSR): August 2017 - August 2018

Volunteer Work

Heels For Hope: Raised money for Courage MKE to build home for homeless LGBTQ+ youth in Milwaukee. Walk-A-Mile-In-Her-Shoes: Sexual assault awareness event where men walk a mile in high heels. DKMS Donor Drive: Assisted Carthage students in registering as possible bone marrow donors.