Mitchell T. Dodson

 $\label{eq:mitchell.t.dodson@nasa.gov} $$mtd0012@uah.edu$$ (270)-421-8875$

PHYSICS MATHEMATICS COMPUTER SCIENCE

602J-3 John Wright Drive Huntsville, AL 35805

keywords

Python, UNIX-like SysAdmin, LaTeX, Perl, Applied and Theoretical Physics, Mathematics, Eagle Scout, 3.938 GPA

education

2018 - present

Currently attending the **University of Alabama in Huntsville** Honors College, seeking a double major in Physics (Applied and Theoretical conc.) and Mathematics, with a Computer Science minor. **98 hours** completed with a **3.923 GPA** (4.0 Major GPA), expecting to graduate May 2022

activities and experience

NASA SPoRT Student Programmer -

1. Designing **dynamic webpages** for complete SPoRT website overhaul, including Javascript/JQuerey CGI scripting for real-time data distribution

2019-Present

- 2. Leading incentive to plan and create new paradigm for SPoRT public relations in the form of a locally-hosted blog, allowing research scientists to quickly, easily, and securely publish their work.
- 3. designing and implementing internal and network software in Python, Perl, and C++ for secure big-data transition and storage

2019

NASA SPoRT Student Programmer - Overhauled data analysis and image composition for SPoRT MAG4 solar weather forecasting software

2011-2018

Member of BSA troop 1705, and the Order of the Arrow. Achieved **Eagle Scout** rank in June 2018. Awarded over than 30 merit badges. 2-term **Senior Patrol Leader**

skills

physics/math

Earned an A in Calculus 1-3, General Physics 1-3, Differential Equations, Linear Algebra, and other related classes; Learned and applied heliophysics principles for MAG4 data analysis

- 1. Python image manipulation and data analysis with matplotlib, numpy, etc.
- 2. Linux system and network operations and scripting with Python, Bash, and Perl
- programming
- 3. Dynamic webpage design with HTML5, CSS, and Bootstrap 4
- 4. LaTeX for formatting and typesetting documentation and technical information
- 5. Object-oriented software and design, especially with C++

honors

2018	Awarded a position on the UAH College of Science 2018 Dean's List
2018	Awarded Eagle Scout rank with Bronze and Gold palms by Troop 1705
2018	Awarded Charger Excellence scholarship by University of Alabama in Huntsville