# ZACHARY **KENNEDY**



#### **EDUCATION**

## Majoring in Physics | Weber State University | Ogden, UT AUGUST 2019 – PRESENT

- Member of HARBOR (High Altitude Reconnaissance Balloon for Outreach & Research)
- Volunteer at the Ott Planetarium

### Associate of Science in General Studies | Weber State University | Ogden, UT AUGUST 2017 – APRIL 2020

Cumulative GPA: 3.8



#### **EXPERIENCE**

### Atmosniffer Development Assistant | Weber State University | Ogden, UT MAY 2021 – PRESENT

- Assisted in the development of the Atmosniffer air measurement system.
- Calibrated Atmosniffer data according to Hawthorn UDAQ station.
- Performed thorough analysis of Atmosniffer data.
- Helped test Atmosniffer through test flights.

### Telescope Operator | Weber State University | Ogden, UT

#### FEBUARY 2021 - PRESENT

- Operated KTPO's remote, robotic telescope to take pictures of asteroids and stars.
- Preformed aperture photometry on stars and asteroids using AstroImageJ
- Analyzed astronomical data using Microsoft excel and python.
- Organized and maintained an large data archive of astronomical data

### **Exoplanet Researcher | Weber State University | Ogden, UT**OCTOBER 2020 – PRESENT

- Experience using Cygwin to run one dimensional climate models on potentially habitable exoplanets using VPlanet software.
- Used python programming for graphs and data analysis.
- Created a one-of-a-kind python software that aids in the selection and processing of potentially habitable exoplanets.
- Funded by the Jim S. Bateman Undergraduate Student Research Award

## NASA Mini-MSA Researcher | Weber State University | Ogden, UT JANUARY 2020 – APRIL 2021

- Assisted in design, testing, and evaluation of a miniature multi-sensor array (MSA) for flight operations, including flight to the edge of space.
- Presented poster of mini-MSA research at Air Quality Science for Solutions Conference
- Team lead on the Mini-MSA version 2, which Northrup Grumman purchased four of.
- Programmed a Raspberry Pi to communicate with a GPS and Winsen sensor board via UART/SPI.
- Modified Raspberry Pi to work as a wireless access point, and hosted a Flask webserver, with an interactive website that allows for remote use and downloading of data from the Raspberry Pi.

### NASA L'Space Academy Mission Concept Intern | Arizona State University JANUARY 2020 – MAY 2020

- Worked remotely in a team of 12, to write a hypothetical mission concept proposal for an unmanned mission to the Moon.
- Helped select an optimal 'landing site', by researching the lunar surface, and finding the best suited location for the mission.
- Created a budget that stayed under \$35 million or less for the mission.

#### Ecommerce Personal Shopper | Walmart | Clinton, UT APRIL 2017 – FEBUARY 2021

- Organizing and dispensing orders swiftly to customers to keep the workspace running efficiently.
- Working in a large team of more than 20 people, communicating to complete tasks effectively and on time



- Experienced Python Programmer
- Cygwin Terminal
- Microsoft Excel Competency

- HTML/CSS programming
- Soldering
- Video & Photo Editing in Adobe Software

### CERTIFICATES

- Introduction to Manufacturing January 12, 2016
- Computer Programming IA Java January 5, 2017
- Computer Programming IB Python May 11, 2018
- Computer Technology May 19, 2017
- Business Office Specialist January 10, 2018