

EDUCATION

Middlebury College Sept. 2018 - Current

Bachelor of Arts Computer Science and Geology Joint Major 2022

Cumulative GPA: 3.88

Honors: College Scholar's List (highest academic honor), Climate Action Fellowship, UWC Davis Scholar

Relevant coursework: OOP & GUI Application Dev, Machine Learning, Intro to Data Science, Programming Languages, Data Structures, Agent Based Modeling, Remote Sensing in Geoscience, Writing on Contemporary Issues

SKILLS

TECHNICAL SKILLS: Python, R, C, C++, Java, Prolog

TECHNOLOGIES: Jupyter Notebooks, Linux, Eclipse, Microsoft Suite

LANGUAGE SKILLS: Native proficiency in Mandarin

EMPLOYMENT

National Center for Atmospheric Research, Summer Internship in Parallel Computational Science Intern, Virtual

June 2021 - Current

- Published **20+** plotting templates on GeoCAT-Examples Gallery and expanded utility function library with **Taylor Diagram** class and convenience functions, making scientific visualization more accessible
- · Implemented NCL analysis routines and utilized Numpy, Matplotlib and Cartopy packages to process and visualize atmospheric and oceanic data
- · Presented process and results to NCAR scientists and engineers through an oral presentation and a scientific poster session

Middlebury College Environmental Studies Department, Research Intern for Easton White, PhD and Mez Baker-Medard, PhD, Virtual Jan. 2021 - May 2021

- Utilized R to implement spatial data analysis to investigate impact of COVID on global fishing dynamics
- · Conducted literature review to contribute to the ongoing research of industrial fishing effort analysis in Marine Protected Area

Middlebury College Computer Science Department, Tutor/Grader, Middlebury, VT

Fall 2019 - Fall 2019, Spring 2021 - Spring 2021

- Reviewed three algorithm-implementation coding projects for 40+ students in Algorithm and Complexity
- Led tutorials in weekly, hour-long group sessions for 60+ students in intro level computer science classes for content review and debugging
- Monitored students' progress in collaboration with other tutors and professors to maintain an inclusive and open environment

Middlebury College Digital Learning and Inquiry, DLINQ Intern, Virtual

June 2020 - Jan. 2021

- Regularly identified and remedied technical issues and design needs of digital learning tools and platforms to support Middlebury College Language Schools, conducting 20+ virtual consultations
- · Designed an opinion survey serving as the template for future assessment of digital needs

LEADERSHIP

Environmental Affairs Committee, Committee Member

- Co-led and rehabilitated Meat Reduction campaign in a team of 3 to achieve 30% in meat reduction on campus, using visual design, survey analysis and a meatless dining hall experiment
- Successfully aligned major stakeholders (Student Government Association, Midd Dining, College Athletics) to a common vision

PROJECTS

Rocket Launch Rate Optimization

Mar. 2021 - May 2021

• Created a desktop application in Qt development framework using C++ with user-input parameters and visualization while optimizing rocket-launching algorithm from 20 seconds in R to 5 miliseconds in a team of 4

Byte the Bullet (Whack Hackathon 2020)

Nov. 2020 - Nov. 2020

• Led a team of four in developing a web interface simulating a bulletin board with a visualization of contact tracing circle (worked on front-end)

COVID County Cases Visualization

June 2020 - Aug. 2020

• Wrangled ~20MB of live, public data with Pandas, to visualize a choropleth map of COVID cases by county using Plotly and Seaborn packges in Python, used in a published blogpost to illustrate the power of data visualization