Sara Moon

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Education

University of Nevada, Reno - Reno, NV

- Bachelor of Science in Chemical Engineering
- Minor in Mathematics
- Minor in Analytical Organic Chemistry
- Expected Graduation: May 2024
- GPA: 4.00

Clubs and Organizations: Women in Science and Engineering, Honors College, Secretary of American Institute of Chemical Engineers UNR Chapter

Experience

UNR Algae Hydrochar Research Lab, Reno, NV

Lab Assistant **05/2022 – Present**

- Measured and tracked the growth of over 180 plants undergoing different treatments
- Displayed resultant data in meaningful ways and presented to a panel overseeing the experiment
- Used application specific tools in a skillful and accurate manner

Kohl's Corporation, Henderson, NV

Floor Associate **05/2021 - 08/2021**

- Filled out orders of up to 40 items multiple times per day
- Performed basic fulfillment and custodial tasks
- Cooperated with 20 other employees between 15 different departments

Professional Development

Technical Skills/Software: Python, Avogadro, MATLAB, Autoclave, Centrifuge, Spectrometer, Biosafety Cabinet, Github

Chemical Engineering powered Car – Basic Machining, Team Collaboration

- Compared and contrasted the pros and cons of 4 separate propulsion mechanisms
- Implemented, tested, and improved on our design over the course of 8 weeks leading to seconds place in the accuracy competition
- Reported on all of the aspects of the project to an audience of peers

Red Meat Heat Transfer and E-Coli destruction Simulation – Python, NumPy, Pandas, MatPlotLib

- Designed necessary equations to model the heat transfer in three dimensions
- Assessed the material composition of the red meat to create a better simulation
- Implemented an event-driven model to assess the effects of 5 different factors
- Consulted with outside expertise to assist in the accuracy of the project

Ammonia Nitrate Fertilizer Model – Python, SymPy

- Formulated 26 real world models to perform a degree of freedom analysis
- Practiced various chemical engineering mathematical calculations
- Developed equations demonstrating transport phenomena and thermodynamics
- Utilized different tools in PowerPoint to create an organized presentation