

Kaleigh Soucy

3 Taine Mountain Rd
Burlington, CT 06013
Cell: (860) 681-9131

Email: krs258@cornell.edu

Cornell University
211 Linden Ave, Apt. 11
Ithaca, NY 14850

OBJECTIVE

To secure a summer internship in the manufacturing sector and work on process optimization through innovative problem solving

EDUCATION

Cornell University, College of Engineering, Ithaca, NY

Expected May 2023

Bachelor of Science, Chemical Engineering

Cumulative GPA: 3.97; Dean's List, Fall 2019, Spring 2020, Fall 2020, Spring 2021

Relevant Courses: Fluid Mechanics; Chemical Process Design and Analysis; Introduction to Chemical Engineering; Physical Chemistry 1 and 2; Organic Chemistry; Differential Equations; Multivariable Calculus; Mechanics; Electromagnetism; MATLAB

Campus Involvement: Golden Key International Honor Society: *Member*, Kappa Delta Sorority: *Corresponding Secretary and Philanthropy Committee Member*

RESEARCH EXPERIENCE

The Hormozi Lab Group, Cornell University, Ithaca, NY, *Undergraduate Researcher*

June 2021-Present

- Assemble and tests laser optics equipment and various cell geometries for experimental imaging of particles in suspension while documenting procedural steps
- Conduct imaging of suspension patterns to model the flow of mudslides and avalanches and processes images through ImageJ for data collection
- Create suspension fluids and is trained to test their properties on a state-of-the-art TA rheometer
- Designed the lab's website and manages frequent updates such as composing lab news articles

Cornell AguaClara Project Team, Cornell University, Ithaca, NY, *Subteam Member*

Sep. 2020-Aug. 2021

- Perform 10 hours of research and report writing per week with 3-4 peers to optimize coagulant dosage for removing humic acid from drinking water in water purification plants
- Test effectiveness of coagulant volumes through a mock sedimentation tank and flocculator by measuring light absorbance of the humic acid before and after coagulation
- Enhanced Arduino setup for infrared and visible light sensors to determine the concentration of dissolved organics through the reflection and transmission of light

LEADERSHIP EXPERIENCE

Cornell AguaClara Project Team, Cornell University, Ithaca, NY, *Professional Development Chair*

Jan. 2021- Present

- Educate and engage project team members in career development resources and strategies through a semesterly workshop
- Initiate connections between 60 project team members and alumni through a mentorship program and panels
- Collaborate with other AguaClara chairs for member recruitment, annual conference logistics and outreach events

Engineering Peer Advising, Cornell University, Ithaca, NY, *Peer Advisor*

June 2021-Present

- Coordinate with one other student and a chemical engineering professor to transition first-year engineering students into the program
- Facilitate weekly information sessions and activities for 17 students and gives feedback to each student on an engineering ethics assignment

Society of Women Engineers, Cornell University, Ithaca, NY, *Committee Member*

Sept. 2019- June 2021

- Cooperated with 6 students to execute a virtual Girl Scout Day for New York Brownie Girl Scouts to earn three coding badges during a 4-hour workshop
- Assisted a team of 6 students to organize and volunteer at 2 fundraisers during the 2019-2020 year, including graphically designing two stickers to sell
- Corresponded with an accepted student about life as a Cornell engineer for Women in Engineering Day

Pandora Dance Troupe, Cornell University, *Treasurer*

June 2021 -Present

- Formulates a yearly budget for the dance team, which includes show ticket sale projections, costuming and event spending
- Oversees ticket sale revenue and distribution twice a year for the team's shows and ensures attendance quotas are met
- Choreographs routines for the groups two annual shows, handling the scheduling and organization of 5-10 dancers

SPECIALIZED SKILLS

Programming and Computer skills: MATLAB, JavaScript, Mathematica, HTML, Excel

Fabrication and Operating Skills: Sawing, Soldering