

# Christina Berels

## Education

- Michigan State University**, East Lansing, MI May 2024 (expected)  
 Master of Science | Biosystems Engineering
- Michigan State University**, East Lansing, MI May 2023 (expected)  
 Bachelor of Science | Biosystems Engineering; Biomedical Concentration | Graphic Design Minor  
 MSU Honors College

## Experience

- Biomechanical Design Research Lab**, East Lansing, MI | *Undergraduate Research Assistant* May 2022 – Present
- Design a system to mount a sensor, determine testing protocol and analyze participant data using MATLAB.
  - Model components using CAD software, fabricate aluminum pieces and 3D print others.
  - Assist Ph.D. students in human and animal trials, literature reviews and 3D motion capture tracking using Qualisys software.
- Fetal Monitor, Conceptual Design Project** | Engineering Design and Optimization for Biological Systems Jan 2022 – May 2022
- Collaborated on a team of 3 to design and plan a conceptual solution to minimize infant mortality in Sub-Saharan Africa.
  - Formulated project statement, goals, objectives, and performance criteria to aid in the creation of a decision matrix.
  - Delivered 3 presentations throughout the semester and compiled a technical report outlining the problem and process.
- Port Huron Golf Club**, Fort Gratiot, MI | *Server* May 2021 – Aug 2021
- Managed orders and accompanying financial transactions.
  - Trained 3 new employees in company procedures and guest communication.
  - Assisted other workers to achieve maximum efficiency during peak attendance times.
- Mary Maxim**, Port Huron, MI | *Employee (Kit Department)* Jul – Aug 2020
- Organized kit components and assembled them whilst operating sealing equipment and ensuring quality.
  - Cataloged orders completed during the day to ensure that the correct quantities of each kit were made.
  - Effectively managed an assembly line station to efficiently complete the processing of merchandise.

## Presentations

- Measuring Hand Strength for Application in Child Resistant Packaging**  
 Christina Berels; Laura Bix, PhD; Cory Wilson, PhD; Tamara Reid Bush, PhD  
 Octopus Inspired Biodesign Symposium | East Lansing, MI Aug 4, 2022
- Maximum Torque for Application in Child Resistant and Senior Friendly Packaging**  
 Christina Berels; Laura Bix, PhD; Cory Wilson, PhD; Tamara Reid Bush, PhD  
 Mid-Michigan Symposium for Undergraduate Research Experiences | East Lansing, MI Jul 27, 2022

## Extra-Curricular Activities

- Phi Sigma Rho Sorority** Sep 2020 – Present
- *VP of Education* | Apr 2022 – Present
    - Oversee the Associate Educator and Traditions Chair.
    - Plan and execute Induction Ritual, Inspiration Week events, and the entire candidate education period.
    - Monitor all candidate members and their progress toward Initiation.
  - *Associate Educator* | Apr 2021 – Apr 2022
  - *Spirit Wear Chair* | Oct – Dec 2020
- MSU Women's Club Ice Hockey** Sep 2019 – Present
- Participate in 3-5 weekly games/practices.
- Women in Engineering** Sep 2019 – May 2020
- Met with other female engineering students to support each other's personal and professional growth

## Volunteer Work

- MSU Adaptive Sports Club Jun 2022 – Present
  - Attend weekly practices to assist in set up and take down of sports equipment (3-5 hours weekly).

## Skills

- Proficient in Microsoft Word, Excel, & PowerPoint, and Siemens NX.
- Trained in AutoCAD Inventor and MATLAB.