

MOHAMMED K. ABDELMAGID

Chicago, IL | Madison, WI | (312) 599-8120 | mabdelmagid015@gmail.com | U.S. citizen and willing to relocate

EDUCATION

UNIVERSITY OF WISCONSIN-MADISON

Bachelor of Science, Biological Systems Engineering – **Machinery Systems** | May 2027

Relevant Coursework: Dynamics Systems | Fluid Power Systems | Geometric Modeling for Design and Manufacturing.

ACADEMIC DESIGN PROJECT EXPERIENCE

Crane Project (Intro to Mechanical Engineering)

Fall 2024

- Designed and constructed a budget-constrained crane, performing load-bearing calculations to ensure the mechanical system could lift a specified load.
- Integrated Arduino (C++) controls and wiring for the electromechanical system and led team coordination through design, testing, and validation phases.

Thermal Oven Design (Geometric Modeling for Design and Manufacturing)

Spring 2023

- Modeled a full system assembly for a thermal oven using SolidWorks, applying principles of thermodynamic system design.
- Applied Geometric Dimensioning and Tolerancing principles to ensure component fit and function, collaborating with a team to produce final design documents and assembly drawings

PROFESSIONAL EXPERIENCE

Lifetime Fitness, Skokie IL

Aquatics Instructor and Lifeguard

June 2022 – August 2025

- Trained and mentored new lifeguards and instructors, improving team operational efficiency and fostering teamwork.
- Communicated complex swimming techniques and safety protocols effectively to over 200 students of diverse ages and skill levels.
- Ensured facility safety and compliance by diligently supervising the aquatic center and enforcing safety protocols in high-pressure situations.

LEADERSHIP AND IMPACT

Alpha Lambda Mu Fraternity

January 2025 – Present

- Coordinated with the team to strategize fundraising events, achieving an increase in total funds raised compared to the previous year.

Dance Marathon

August 2022 - May 2022

- Coordinated with the team as a finance chair to strategize fundraising events, achieving an increase in total funds raised compared to the previous year.
- Monitored and analyzed financial data to ensure budget compliance, meeting the club's end-of-year goal of approximately \$40,000.

SKILLS

Software: SolidWorks, Fusion 360, AutoCAD, Python, Microsoft Excel, MATLAB, Microsoft Powerpoint

Hardware: 3-D Printing, Welding, Soldering, Tensile Testing

Global Languages: Arabic