

# Mikayla Ogulei

Email: [mogulei@mit.edu](mailto:mogulei@mit.edu)

Phone: (312) 468-4891

Location: Cambridge, MA

## EDUCATION

### Massachusetts Institute of Technology (MIT)

Candidate for Bachelor of Science in Mechanical Engineering

Cambridge, MA

Expected May 2029

### Naperville Christian Academy

Graduated Summa Cum Laude

Naperville, IL

May 2025

## WORK EXPERIENCE

### Caterpillar

STEM Student Trainee Intern

Aurora, IL

Summer 2023

- Interned in the Medium Wheel Loader quality department resulting in multiple improvement presentations to team
- Scrutinized CAD files and documented placement and sizing errors for quality control
- Streamlined Lean Six Sigma Defect Free Operating System (DFOS) processes including quality control procedures and MS Excel reporting templates
- Preformed hands-on bearing experiments researching lubricant limitations, tracked outputs, and reported data

### RoboThink

Robotics Instructor

Chicago Suburbs

Summer 2024; Summer 2025

- Taught engineering concepts to children aged 7-12 in the form of modular robotics kits
- Fostered creativity and problem solving in students in order to bring their ideas to life with designs and prototypes
- Troubleshoot malfunctioning components and organized class materials

### Self-Employed

Private Tutor

Naperville, IL

June 2021 – June 2025

- Mentored 3<sup>rd</sup> – 7<sup>th</sup> grade students resulting in an increase in their work ethics
- Taught various subjects including mathematics, grammar, logic, and Latin
- Adapted lessons based on teacher and parent feedback resulting in increased grades

## RELEVANT ACTIVITIES AND RESEARCH

### FIRST Robotics Competition

Project Manager, Mechanical Lead, Pit Lead, Driver

Naperville, IL

August 2021 – June 2025

- Revised team structure and processes as Project Manager taking a non-playoff team to become an alliance captain
- Grew team ability of 1 mechanism on mecanum drive to 3+ mechanisms on swerve drive as Mechanical Lead
- Operated the robot in 2023 resulting in an 8% match win increase from the previous year
- Established and mentored a new FLL team for a small humanities-based school to involve 50+ students in STEM
- Won Dean's List Award Finalist in March 2024 at the Central Illinois Regional for dedication to FIRST program

### MIT Motorsports

Aerodynamics Manufacturer

Cambridge, MA

September 2025 – Present

- Manufacture and optimize carbon fiber parts to construct aerodynamic packages in collaboration with a team

### Naperville Christian Academy Senior Thesis

Researcher, Author, Speaker

Naperville, IL

August 2024 – May 2025

- Wrote 32-page thesis comprised of analysis and recommendations for the current landscape of DEI for Engineering hiring culminating in a 40-minute presentation for the school body with 20 minutes of fielding live questions

## SKILLS

- **Software:** 2+ years of CAD (Fusion360, Onshape, Siemens NX), MS Office Suite, basic Java & HTML/CSS
- **Hardware:** CNC, carbon fiber layup, hand & power tools, 3D printing, etc.
- **Interpersonal:** proactive, detail-oriented, hard-working, collaborative, curious, quick learner