# Ava Rosenow

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## **EDUCATION**

Cornell University, College of Engineering, Ithaca, NY

**Expected May 2027** 

Master of Engineering in Engineering Management, **GPA: 3** 

Latin School of Chicago, Chicago, IL Cum Laude, GPA: 4.13 May 2023

Selected Coursework: Waves (SP25) • Dynamics (SP25) • Statics • Linear Algebra • Thermodynamics • Differential Equations • Physics Mechanics • Physics E&M (AP) • Multivariable Calculus • Introduction to Python

## SPECIALIZED SKILLS

TIG Welding, Hand Tools, SolidWorks CAD, Ansys FEA, HSMWorks CAM, CNC Machining, Manual Mill, Manual Lathe, MATLAB, Spanish (Basic)

## RELEVANT EXPERIENCE

## Cornell Baja Racing, Chassis Subteam Member, Ithaca, NY

Oct. 2023-Present

- Active participant in a team of ~50 members working to design and fabricate an off-road vehicle to compete in the Baja SAE racing competition. 2024 vehicle won 1st overall out of 100+ teams internationally.
- Designed welding fixtures for all frame, suspension, and drivetrain components for 2024 2025 car, saving 50+ hrs of machining time while improving overall tolerance stack. Decreased cost by more than \$1100.
- Designed engine subframes for 2024 2025 car using FEA to optimize for vibrational loading and fatigue characteristics.
- Was responsible for designing all non-structural tabs for 2023 2024 vehicle to comply with SAE regulations. Achieved a 16.7% weight reduction across overall subsystem.
- Assisted in weld fabrication of 2023 2024 & 2024 2025 suspension linkages and chassis; helped service old team cars.
- Machines manual mill and lathe parts for the team in the Emerson Student Machine Shop (Red Apron Certification).
- 200+ hours of TIG welding experience.

## FTC Robotics Team 4965, Team Captain, Chicago, IL

2019 -2023

• Built various components for the robot and wrote 100+ page document detailing the engineering design process throughout the season

## Science Olympiad Coach, Volunteer, Chicago, IL

2019 - 2023

 Researched and taught myself material, prepared lessons for 30+ students in two events, and facilitated and organized weekly practices

## ADDITIONAL EXPERIENCE

Soccer Director, Game On! Sports for Girls, Chicago, IL

**Summer 2024** 

**Intramural Soccer Referee,** Cornell University, Ithaca, NY

August 2023 - Present

Customcollages4you, Co-founder, Chicago, IL

**2020 - Present**