

Ava Rosenow

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EDUCATION

Cornell University, College of Engineering, Ithaca, NY
Bachelor of Science, Mechanical Engineering , **GPA: 3.15**

Expected May 2027

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 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