

MAGNUS CARSON

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EDUCATION

Cornell University, College Engineering

Bachelor of Science in Mechanical & Aerospace Engineering

May 2028

Ithaca, NY

- **GPA:** 4.1/4.33

- **Coursework:** Statics, Dynamics, Thermodynamics, Uncertainty Analysis, Linear Algebra, Differential Equations

The American School in London

High School Diploma

June 2024

London, England

- **GPA:** 3.97/4.0

- **Honors:** National Honor Society, Honor Roll all Semesters, NMSC Commended Scholar
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EXPERIENCE

Brakes Subteam Member Cornell Baja Racing SAE

Nov. 2024 -

Arizona 2025 Overall Win, South Carolina 2025 Overall Win

- Design, manufacture, test entirely custom master cylinders & hydraulic brakes system.
- Tune & numerically analyze brakes and further vehicle dynamic characteristics to maximize drivability.
- Program & operate CNC and manual mill and Lathe.
- Introduce new brakes maintenance methods to ensure performance & consistency.
- Achieved zero competition failures in brakes lines on 2025 car.

Teaching Assistant – ENGRD 2020 Statics & Mechanics of Materials Cornell Engineering

Fall 2025 -

- Lead 18-person discussion section, teaching and reviewing new content.
- Assist 250 students in core curriculum work through office hours & online forum.
- Manage upkeep & usability of course webpage & assignment structure.

Design Lead, CAD/CAM Lead Robotics - FIRST Team 1884 Griffins

2021-2024

Founders' Award Recipient 2024, Engineering Inspiration Award 2023&2024

- Lead teams & held lectures in designing and prototyping a competitive robot.
- Qualified for World Championships 2023 & 2024.
- Introduced first ever CNC machining for the team, fitting bespoke cooling and enclosure.
- Educated younger team members on the importance of designing for manufacturing.
- Ensured quality & consistency while machining 75% of all parts for the competition robot.

Team Mentor, Event Coordinator FIRST U.K. FTC London Tournament

2022-2024

- Aided many new teams in preparation for their first tournaments.
- Administrated and scored multiple tournaments for 50+ teams in the greater London area.

Varsity Men's Rowing The American School in London Boat Club

2020-2024

- Raced in Henley Royal Regatta & Head of the Charles Regatta.

Custom Pen Plotter & Basic Software Personal Project

2023

- Designed and built successful pen plotting device and gCode generation software
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SKILLS

CAD/CAM (*SOLIDWORKS, Fusion 360, HSMWorks*), Programming (*MatLab, Java, Python, SQL, LaTeX*) Manual Mill & Lathe, ANSYS FEA, General Metal Fabrication, FDM 3D Printing, Skiing, Mending Textiles