JEFFREY WILCOX

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EDUCATION

Cornell University, Ithaca, NY GPA:4.07/4.00

- College of Engineering
- Electrical and Mechanical Engineering
- Relevant Course Work: Electromagnetic Fields and Waves, Photonics: Fundamentals and Devices, Introduction to Microelectronics, Introduction to Circuits for Electrical and Computer Engineers, Lasers and Photonics, Data Science for Engineers, Automotive Engineering, Statics and Mechanics of Solids, Dynamics, and Thermodynamics

Worcester Polytechnic Institute, Worcester, MA GPA:3.85/4.00

August 2020 - May 2021

Expected Graduation: December 2024

- Senior Year of High School (Massachusetts Academy of Math and Science)
- Simultaneous Completion of Independent Study Project in Woodworking
- Relevant Course Work: Digital Circuit Design, Introduction to Robotics Engineering, Graph Theory, Mathematical Modeling with Differential Equations, Linear Algebra

PROFESSIONAL WORK EXPERIENCE

Grader and Tutor

Cornell University College of Engineering Ithaca, NY

August 2022 – December 2022

- Tutor students who need more interactive work with course material in Statics and Mechanics of Solids as well as Multivariable Calculus for Engineers
- Grade homework for Statics and Mechanics of Solids
- Deliver useful feedback for students to improve their understanding of course material

Electrical and Controls Engineering Intern

Headwaters Solutions LLC. *Ithaca, NY*

June 2022 - August 2022

- Construct ladder logic diagrams for how components receive signal and power along with overcurrent protection
- Develop and revise drawings for physical structures related to hydrogen refinement skids
- Construct part orders and communicate with distributors to acquire the needed products within a tight time constraint

EXTRACURRICULAR ACTIVITES

Cornell Racing Formula SAE – Part Designer

October 2021 - Present

- Collaborate with an interdisciplinary Project Team to compete on an international level
- Work on electrical and mechanical sub teams to stress test pedals, layup carbon fiber to the body of the car, update the team website and test printed circuit board functions
- Design and analyze chain drive system to deliver mechanical power to wheels of the car

Cornell Ski and Snowboard Club - Social Media and Web Design Chair

September 2021 - Present

- Monitor and post on social media accounts to relay club information and answer questions
- Edit the website to stay up to date with club activities
- Attend weekly meetings to plan future club events

FRC Robotics Team 190 – Captain

September 2019 - May 2021

- Participated in the team as a part designer
- Worked in the machine shop to manufacture individual pieces
- Managed the team schedule and organized event

LANGUAGES, INTERESTS, & SKILLS

Languages: English, French (Conversational)

Interests: Camping, Cars, Downhill Skiing, Backpacking, Photography, Rock Climbing, Cooking, Woodturning, Woodworking **Skills:** CAD (Inventor Autodesk, Solidworks), Ansys, Altium, 3D Printing, Soldering, Matlab, Mathematica, Microcontrollers

(Arduino + ESP32), Python, Java, HTML, CSS, Javascript, LaTeX

Awards: Eagle Scout