

JEFFREY WILCOX

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EDUCATION

Cornell University, Ithaca, NY GPA:4.10/4.00

Expected Graduation: December 2024

- Bachelor of Science in Electrical and Computer Engineering
- Relevant Course Work: *Analog Integrated Circuit Design, Electromagnetic Fields and Waves, Photonics: Fundamentals and Devices, Signals and Systems, Introduction to Microelectronics, Introduction to Circuits for Electrical and Computer Engineers, Lasers and Photonics, Data Science for Engineers, Digital Logic and Computer Organization, Automotive Engineering, System Dynamics, Statics and Mechanics of Solids, Dynamics, and Thermodynamics*

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

August 2020 – May 2021

- 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

Design Release Engineering Intern

June 2023 – August 2023

General Motors Warren, MI

- Reviewed over 500 frontal crashes to determine correlation between post-crash electrical failures
- Produce graphs to easily convey over \$30 million of damages in almost 200 vehicle program fixes
- Develop a task scheduler in Excel using Visual Basic to create calendars for specific vehicle programs

Grader, Tutor, and Teaching Assistant

August 2022 – Present

Cornell University College of Engineering Ithaca, NY

- Tutor students who need more interactive work with course material in Statics and Mechanics of Solids as well as Multivariable Calculus for Engineers. Hosted office hours for Electromagnetic Fields and Waves
- Grade homework for Statics and Mechanics of Solids, and Electromagnetic Fields and Waves
- Deliver useful feedback for students to improve their understanding of course material in person and through online tools

Electrical and Controls Engineering Intern

June 2022 - August 2022

Headwaters Solutions LLC. Ithaca, NY

- 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

EXTRACURRICULAR ACTIVITIES

Cornell Racing Formula SAE – Part Designer

October 2021 - Present

- Collaborate with an interdisciplinary Project Team to compete on an international level to stress test pedals, layup carbon fiber, update the team website, machine aluminum clevises, and test printed circuit board functions
- Mechanical Design - Design and analyze chain drive system to deliver mechanical power to wheels of the car
- Electrical Design - Design and analyze power distribution unit to deliver electrical power to low voltage systems

Cornell Ski and Snowboard Club – Co-President

September 2021 - Present

- Organize and lead large week long ski trips for 20+ people
- 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

Engineering Dean Advisory Council – Member

October 2022 - Present

- Attend quarterly meetings with the Dean of Engineering to discuss relevant issues within the College of Engineering

LANGUAGES, INTERESTS, & SKILLS

Languages: English, French (Conversational)

Interests: Camping, Cars, Skiing, Backpacking, Photography, Rock Climbing, Cooking, Woodturning, Woodworking, Reading

Skills: Cadence, Altium, LTSpice, Soldering, Python, TensorFlow, Java, HTML, CSS, Javascript, LaTeX, Git, MATLAB, CAD (Inventor Autodesk, Solidworks), Mathematica, Verilog, Microcontrollers (Arduino + ESP32)

Awards: Eagle Scout, Eta Kappa Nu