

Carter Boyles

<https://boylecar.github.io> | 3353 Lawrence St SE Salem OR 97302 | (503) 559-8722 | boylecar@oregonstate.edu

Education

Oregon State University | GPA: 4.0 | **| Corvallis, OR | Sep. 2022 – Present |**
BS Electrical and Computer Engineering **| Expected Graduation: Jun. 2025 |**
Minor: Computer Science

Experience

Global Formula Racing | Design Engineer **| Corvallis, OR | Sep. 2022 – Present |**

- 3D modeling with CAD software (NX) to create parts to test and optimize battery cell connection
- Create and label technical drawings for modeled parts with NX software
- Production of physical models with milling machine and band saw, tolerance of .005 in.

Personal Projects

Automatic Watch Winder **| January 2023 |**

- Design and create a custom circuit powered by an Arduino controlling a stepper motor to rotate and wind mechanical watches over time
- Program microcontroller with Assembly Language, C/C++
- Build electronic circuits with breadboard and microcontroller, soldering.

Transformer Efficiency Research Project **| February 2022 |**

- Build transformers with iron toroid ferrite core and use multimeter/oscilloscope to observe the effects of temperature, loops of transformer, loop ratio, and different power sources on efficiency and power output of transformers.

Project Portfolio Website – <https://boylecar.github.io> **| January 2023 |**

- Build a website from scratch with HTML and CSS to display my resume and project portfolio
- Track my growth as engineer through planning, process, and reflection of my projects.

Wooden Chest **| January 2023 |**

- Create technical drawings and build a wooden chest to store photos and notebooks.
- Use table saw, miter saw, jointer, planer, and apply finish.

Knowledge and Skills

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| • Proficient in: Python, C & C++, HTML, CSS, JavaScript, Matlab | • Machines/tools: milling machine, band saw, table saw, miter saw, jointer, planer, sander, router, lathe |
| • CAD modeling and 3D printing software | |
| • Circuit analysis and design, soldering | • Multimeter, oscilloscope, power sources |