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 Arduino microcontroller with 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

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