
Ethan Wheeler, Student Engineer and Researcher

+1-865-599-4286 • Ethan.wheeler000@gmail.com • engineeringmarten.com

SUMMARY OF QUALIFICATIONS

I have many unique experiences in many fields of engineering: CAD, 3D printing, construction overseeing, wet lab work, Field work, Drone piloting for a spatial analysis lab. I am driven in my own personal projects, developing my skills outside of class and making things that are useful based on what I have learned in my experiences. I appreciate and strive for efficient use of resources to complete projects.

EDUCATION

Roane State Community College	Oak Ridge TN
<i>Associate's degree</i>	May 2020
University of Tennessee Knoxville	Knoxville, TN
<i>Biomedical engineering major- Neuroscience minor</i>	May 2027

RELEVANT COURSEWORK

Mechatronics | Signal Analysis | System Dynamics | Material Science | Engineering Fundamentals | Circuits |

SKILLS

Technical: Fusion360, Blender, Adobe Suite, Davinci, Coding, Drone piloting

Professional: International experience, Technical writing, Oral/Visual Presentation, Laboratory Procedures, Field work

RELEVANT PROJECT EXPERIENCE

Resumé Arm

October 2025 – February 2026

Self-designed machine with a robotic arm, and a paper dispenser

- Researched capabilities of hardware I had on hand and what I would need to design the machine
- Sourced parts and designed the mechanisms and interfaces in CAD software, rapidly iterated and 3d printed them
- Built a frame and tested extensively while wiring and coding the arm and dispenser
- Adjusted design during building to correct unforeseen issues
- Optimized for cost as it was self-funded Total Cost (600\$)

Building Electric Bikes

October 2024 – May 2025

Mountain and road bike conversion to electric

- Researched how current products work and what it would take to make my own battery packs and convert my bikes to electric
- Bought cost effective hardware to apply to my bikes successfully kept a budget of 250\$
- Learned how to make battery packs safely
- Successfully used these to power my bikes for many months.

RELEVANT WORK EXPERIENCE

United States Public Health Service -Indian Health Service

Portland, OR

Engineering Intern

May 2025 – August 2025

- Worked with overseeing current and future civil engineering construction projects of medical facilities.
- Inspected water treatment systems on Indian reservations, including pump systems, storage tanks, and water treatment systems.
- Performed environmental audits for the EPA for reservation sites.

Kelvion

Knoxville, TN

Quality Engineer Intern

Jan 2024 – May 2024

- Worked as a quality tech inspecting heat exchanger manufacturing and shadowed engineers
- helped with reading engineering drawings and tracking supply problems

Karolinska Institute

Stockholm, Sweden

Research Assistant

Jan 2024 – May 2024

- Performed immunochemistry fluorescent staining on human brain tissue samples
- Gathered data and analyzed it to understand specific protein expression in certain brain regions and their co-expressed proteins.

University of Tennessee NIMBios lab

Knoxville TN

Drone Pilot

June 2023 – May 2025

- Piloted a Mavic 2 Enterprise drone for recording thermal and visual pictures
- Registered and completed airworthiness check