

Trent Wetherington

SAINT LOUIS

314-756-3240 | Trentweth@gmail.com | [linkedin.com/in/trent-w/](https://www.linkedin.com/in/trent-w/) | www.TrentPortfolio.com

Education

University of Missouri-Columbia
Bachelor of Science in Mechanical Engineering
Minor: Aerospace Engineering

Aug 2023 - May 2027
GPA: 3.63

Experience

MOSGC, Research Intern

May 2026 – Present

- Authored standard operating procedures for sub-ambient cooling panel operation, testing, and evaluation.
- Supported the design and manufacturing of cooling panels, including fabrication planning and system refinement.
- Collaborated with professors, graduate students, and research personnel through weekly meetings to communicate progress and address project objectives.

Timberline Cabinets, Engineering Intern

May 2025 – Aug 2025, May 2026 – Present

- Coordinated directly with contractors, clients, architects, and vendors to clarify project requirements, resolve questions, and support accurate project execution.
- Prepared and reviewed bids for custom cabinet projects valued from several thousand to over ten thousand dollars, ensuring accuracy in measurements, materials, and scope of work.
- Created CAD/CAM shop drawings in QCAD/CAM for contractor approval, fabrication, and installation.
- Developed shop workflow improvements, including a QR/barcode CNC file system and 3D printing implementation to improve organization, prototyping, and productivity.
- Optimized CNC preparation processes through QCAD/CAM workflow improvements and post-processor development.

Mizzou Undergraduate Research, Research Assistant

Aug 2025 - Current

- Supported nanomanufacturing research of parylene-based optical waveguides through chemical vapor deposition
- Partnered with professors, graduate students, and undergraduate researchers on fabrication, testing, and documentation.
- Completed chemical safety, cleanroom, ellipsometry, PDS 2010, and HR training within two weeks
- Assisted with research documentation, including a poster and manuscript for conference presentation and publication.
- Presented research findings at a Missouri S&T conference to communicate project results and research progress.

Mizzou Ultimate Frisbee, Captain & Social Media Manager

Aug 2023 – Current

- Led a 45+ member team mainly through online communication. Facilitated volunteer opportunities in order to reach the required amount of volunteer hours by the end of the academic year.
- Responsible for tournament logistics, consideration of funds, timely submissions of forms, transportation planning, hotel reservation, and communication to the University of Missouri-Columbia.

Projects

- Autonomous Vent | Personal Project | 2026
 - o Designed a temperature-controlled system using ESP32s, wireless communication, and a closed-loop mechanical actuator.
 - o Integrated a NEMA 23 stepper motor, TB6600 driver, temperature sensors, and heating/cooling logic.
- Cycloidal Drive | Personal Project | 2026
 - o Designed a durable, near-zero backlash, and compact speed reducer to amplify torque.
 - o Integrated off the shelf parts with custom 3D printed design to create a cycloidal drive
- Trentportfolio.com | More information available for each project

Awards

- Engineering High Dean's List 2026
- Engineering High Dean's List 2025
- Engineering High Dean's List 2023
- Engineering Dean's List 2024
- Curators Scholars Award

Skills

- SolidWorks
- AutoCAD, QCAD/CAM
- MATLAB, Python
- FDM Printing, CNC
- Excel, Word, Outlook
- Technical Documentation
- GD&T, RCA
- Communicator
- Adaptability
- Attention to detail