

Quenton Walion

Lawrence, Kansas | qwalion432@gmail.com | (913) 201-1601

Education:

The University of Kansas

Bachelor of Science in **Mechanical Engineering** with a Certificate in **Bioengineering**,
Expected Graduation: Spring 2026 | GPA: 3.36

Lawrence, KS
August 2021 – Present

Athletics and Leadership:

University of Kansas Cross Country, Track and Field

Student Athlete

Lawrence, KS
August 2021 - Present

- Balanced rigorous training and academics, demonstrating discipline, adaptability, and time management.
- Sub-4:00 miler (3:59.83), providing firsthand knowledge of athletic performance demands and equipment interaction.

Skills:

- **Biomechanics & Performance Fit Analysis:** Pressure mapping, gait analysis, footwear fit & wear testing, and materials performance evaluation.
- **Data & Analysis:** Microsoft Excel, data visualization, quantitative data reporting, data accuracy & tracking systems, and MATLAB.
- **Collaboration:** Cross-functional communication, technical storytelling, and participant engagement.
- **Engineering & Design:** SolidWorks, tolerance analysis, design documentation, experimental design, and prototyping.

Professional Experience:

Ad Astra Running LLC

Footwear Specialist

Lawrence, KS
May 2023 - Present

- Delivered custom footwear fittings using principles of biomechanics, materials performance, and fit & wear testing.
- Collected and analyzed customer feedback to identify product performance trends.
- Used Excel and retail analytics tools to evaluate sales performance and support product lifecycle decisions.
- Launched and led a Run Club for college aged individuals, coordinating events and fostering a collaborative running community while gathering insight on performance fit.

LMH Health

Junior Biomechanical Analyst

Lawrence, KS
July 2021 - August 2024

- Supported laboratory-based biomechanical testing and footwear fit evaluations for 100+ collegiate athletes using pressure mapping and gait analysis systems.
- Produced technical reports and data visualizations translating findings into actionable insights.
- Coordinated testing workflows, maintained Excel-based datasets, and ensured a high-quality participant experience.

Fleet Feet

Footwear Specialist

Overland Park, KS
May 2021 – January 2023

- Guided customers through fit testing and product selection using performance-driven footwear knowledge.
- Collaborated with store and brand teams to translate consumer feedback into actionable insights.
- Supported inventory coordination, product testing, and visual merchandising during product launch cycles.

Relevant Courses and Projects:

- **ME 455 (Measurements & Experimentation):** Designed an Arduino-based footwear impact test rig using a load cell and piezo sensor to quantify midsole force attenuation; calibrated sensors, collected and analyzed time-series data, and evaluated EVA vs TPU vs PEBA/TPE midsoles.
- **ME 750 (Biomechanics of Human Motion):** Modeled the javelin throw release phase in MATLAB using a two-link arm system to analyze how shoulder and elbow torques influence release velocity and overall power transfer.
- **ME 501 (Mechanical Engineering Design Process):** Structured design methodologies, concept evaluation, and prototyping.
- **ME 633 (Basic Biomechanics):** Applied mechanics of human movement and load distribution.

