

KALEB VERNER

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Summary

Motivated mechanical and applied physics student with hands-on experience in robotics construction, automation systems, and the engineering design process. Demonstrated ability to apply electrical and mechanical engineering principles to real-world problems across competitive robotics, national laboratory research, and engineering development programs. Eager to contribute technical skills and a strong work ethic to Milwaukee Tool's automation engineering team as part of the Summer 2027 internship program.

Education

Morehouse College — Atlanta, GA

Bachelor of Science in Applied Physics and Mechanical Engineering | Aug. 2024 – May 2029

Relevant Coursework: Intro to Python, Calculus 2, Physics 221, Physics 154 & Lab, Algebra 2, Precalculus, Integrated Design Engineering & Arts, Freshman Engineering Design

Experience

Robotics Coach | Aug. 2025 – Present

Lonnie Johnson STEM Activity Center — Atlanta, GA

- Coach First Tech Challenge, First Robotics Competition, and First LEGO League teams, overseeing the full engineering design lifecycle from ideation through competition-ready build.
- Developed structured coursework on mechanical assembly, motor control, and sensor integration, enabling students to design and program autonomous robotic systems.
- Guided students through iterative prototyping and debugging cycles, reinforcing systematic problem-solving and quality verification processes relevant to automated manufacturing environments.

Bridge into Internships | June 2024 – Aug. 2024

Argonne National Laboratory — Lemont, IL

- Designed and implemented an autonomous vehicle outreach program using a DonkeyCar platform, applying concepts in computer vision, motor control, and embedded systems.
- Applied data analysis techniques in Python to interpret complex experimental datasets, producing insights that directly informed project direction and performance improvements.
- Presented technical research findings to multidisciplinary audiences, translating complex engineering concepts into clear, actionable information.

- Participated in professional development workshops focused on technical leadership, cross-functional collaboration, and process optimization within a research and engineering environment.

Pre-Freshman Science and Engineering Program | June 2023 – Aug. 2023

Chicago State University — Chicago, IL

- Completed a rigorous summer curriculum in engineering and applied science, gaining foundational knowledge in physics, materials, and engineering design methodology.
- Executed collaborative hands-on projects applying scientific principles to design, prototype, and test engineering solutions under time and resource constraints.
- Built technical communication and leadership skills through peer collaboration, design presentations, and engineering seminars led by industry professionals.

ACE Mentor Program | July 2023 – Dec. 2023

- Collaborated with professional engineers on large-scale construction and infrastructure projects, gaining exposure to cross-disciplinary technical coordination and systems-level thinking.
- Developed experience managing complex, multi-phase workloads within structured team environments, with emphasis on precision and process adherence.

Project Syncere | Sept. 2023 – Aug. 2024

- Engaged in a year-round engineering program with an intensive focus on the engineering design process, including iteration, prototyping, and performance evaluation.
- Developed process efficiency techniques applicable to automation workflows, production line improvement, and quality control systems.

Robotics Apprenticeship | Oct. 2022 – Dec. 2022

After School Matters (ASM) — Chicago, IL

- Constructed battery-powered mechanisms including racecars and app-controlled articulated robots, applying foundational electrical engineering and circuit assembly skills.
- Coordinated with a diverse team to complete multi-phase robotics builds, demonstrating technical precision and collaborative problem-solving under project deadlines.

Technical Skills

Engineering: Mechanical assembly, robotics systems, automation fundamentals, electrical circuit construction, sensor integration, motor control, iterative prototyping

Software & Programming: Python, Microsoft Office Suite (Word, PowerPoint, Excel), data analysis

Core Competencies: Engineering design process, technical documentation, cross-functional collaboration, systematic troubleshooting, process optimization