

ISAIAH KOL

MECHANICAL ENGINEERING SOPHOMORE

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SUMMARY

Mechanical engineering student with a background in competitive robotics and direct experience designing, fabricating, and iterating mechanical systems rapidly under practical constraints.

EDUCATION

UNIVERSITY OF VERMONT | Burlington, VT

AUG 2024 – PRESENT

Bachelor of Science, Mechanical Engineering | Expected May 2028

- GPA: 3.80 | Dean's List
- Relevant Courses: Thermodynamics (A); Applied Thermodynamics (A); Advanced 3D Drafting (A+); Statics (A+); Calculus III (A+); Computer Programming I (A); First-Year Design Experience (A).

PROFESSIONAL EXPERIENCE

OPERATIONS MANAGER (IN-TRAINING) | UVM FABLAB

DEC 2025 – PRESENT

- Shadowing current operations manager and transitioning into full leadership role by end of semester.
- Responsible for coordinating technicians and overseeing daily operation of FabLab and its equipment.
- Driving workflow, equipment, and space improvements to optimize lab operations and engagement.
- Balancing operational leadership with full technician responsibilities.

TECHNICIAN | UVM FABLAB

SEP 2025 – DEC 2025

- Operated 15+ 3D printers and other fabrication equipment for student projects and university research.
- Supported clients with CAD, projects, and in-house equipment use.
- Supported lab organization, safety practices, and routine machine maintenance.

LINE COOK & COUNTERWORKER | DARTMOUTH COLLEGE DINING SERVICES

AUG 2022 – AUG 2024

- Balanced customer service with food prep and cooking in a fast-paced dining environment.

ADDITIONAL EXPERIENCE

GAP-YEAR: ROBOTICS COACH | THETFORD ACADEMY ROBOTICS TEAM

AUG 2023 – JUN 2024

- Mentored students aged 12-18 in iterative design processes, both in CAD and hands-on prototyping.
- Instructed and supervised safe, proper operation of tools and equipment.

ROBOTICS TEAM | VEX ROBOTICS COMPETITION

SEP 2017 – JUN 2023

- Collaboratively responsible for design, construction, and technical documentation.
- Four-time competitors at VEX World Championship; 2023 NH/VT State Champions; recipients of three Design Awards and three Excellence Awards at the regional (NH/VT) level.

INTERNSHIP AT HYPERTHERM & FUJIFILM DIMATIX | LEBANON, NH

AUG 2021 – JAN 2022

- Gained exposure to manufacturing practices and engineering environments.
- Built foundational skills in CAD and CNC/manual machining through guided projects.

SKILLS

CAD: SolidWorks, AutoCAD

Fabrication: FDM 3D Printing, Design for Manufacturability, Basic Machining, Automotive & Electrical Repair

Software: Python, Microsoft Excel, Bambu Studio, PrusaSlicer