

# Aaron Beckman

[www.aaronbeckman.xyz](http://www.aaronbeckman.xyz)

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## Education

### **B.S. Mechanical Engineering – Expected May 2024**

University of Wisconsin–Madison

Dean's Honor List

## Skills

<b>Computer-Aided Design</b>	Creo Parametric, SolidWorks, Fusion 360
<b>Simulation and Analysis</b>	ANSYS simulation suite, PTC MathCAD, MATLAB
<b>Project Management</b>	PTC Windchill PDMLink
<b>Programming</b>	Python, shell scripting, C/C++ microcontrollers
<b>Electronics</b>	DC and AC circuit design, soldering, UL standards

## Work Experience

### **R&D Mechanical Engineering Intern**

*May 2022 – Aug 2022*

Sandia National Laboratories – Albuquerque, NM

- Worked closely with a team of mechanical engineers focused on nuclear weapon tester development.
- Designed 3D printed brackets and CNC milled parts for several confidential projects.
- Led a design review meeting, and created technical drawings to document design intent.

### **Product Development Intern**

*Dec 2019 – Mar 2022*

Cyclikal – Saint Paul, MN

- Led design, iteration, and production of a wired thermal chamber for battery performance testing.
  - Completed “full-stack” engineering: design, electronics, and assembly.
  - Over 15 units produced; used internally as well as in a Fortune 500 company.
  - Experience with the patent process and UL listing (standard UL/CSA 61010).
- Used data-driven calculations to aid design and completion of several smaller week-long projects.

### **Materials Informatics Intern**

*Jan 2019 – Aug 2019*

3M Corporate Research Lab – Maplewood, MN

- Programming and design of an IoT device for company-wide cloud data management.
- Worked alongside software engineers to develop programming skills and project management experience.

## Research and Leadership Experience

### **Undergraduate Researcher – UW Badger Prosthetics and Robotics Lab**

*Jan 2022 – May 2022*

- Redesign and expansion of an active response prosthetic foot in a three student team.

### **Team Captain – Central High School FIRST Robotics Team**

*Sept 2016 – May 2020*

- Led design and fabrication of five 120lb robots; led prototyping and strategy sessions.
- Wrote grant applications and organized competition, fundraising, and outreach events.

## Patents and Publications

“Wired Thermal Chamber” – (*pending*) US Patent Application – Aug 7 2021.

K. J. Tompkins, et al., **A. P. Beckman**, “Development of a centrifuge force microscope,” bioRxiv, 2020.