

Aidan Beckett

Mechanical Engineer

EDUCATION

Tufts University — *B.S. Mechanical Engineering*

SEPTEMBER 2019 - MAY 2023

GPA: 3.89

- Major in Mechanical Engineering with Minor in Human Factors Engineering
- Club Ice Hockey Captain
- Jazz Ensemble
- Pre-Orientation Leader

EXPERIENCE

Formlabs — *Hardware Test Engineer Intern*

SEPTEMBER 2023 - PRESENT

- Independently designed, built, and implemented automated testing equipment to characterize and validate critical 3D printer subsystems.
- Analyzed and synthesized data in test reports to effectively inform stakeholders.
- Designed and built an assembly rig to improve manufacturability and address a chokepoint in the assembly process.

Tufts University — *Research Assistant*

JUNE 2022 - DECEMBER 2022

- Assisted in preparing and running high temperature superconductor quench experiments.
- Developed a Finite Difference acoustic model in Matlab to compare to experimental data.
- Fabricated parts for use in quench tests.

Laborie Medical Technologies — *R&D Mechanical Engineering Intern*

MAY 2022 - AUGUST 2022

- Implemented test protocols for products on the market and in development, performed root cause analysis to help identify bugs.
- Assisted in writing testing protocols and reports.
- Created product mockups and prototypes in Solidworks.
- Designed and 3D printed parts for test fixtures.

Vitae Industries — *Mechanical Engineering Intern*

JUNE 2021 - AUGUST 2021

- Designed sheet metal and machined parts and quoted local and international manufacturers.
- Made technical drawings of parts for manufacturers.
- Was responsible for scaling up production of parts from small scale (5-10 parts per order) to medium scale production (50-100 parts per order).

Onshape — *Intern*

FEBRUARY 2020 - JUNE 2020

- Created educational content on Onshape's 3D CAD software and programming language.

Portfolio:

aidanbeckett.com

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SKILLS

Rapid Prototyping; 3D printing, Silicone Molding, Milling, Lasercutting, Water Jetting

3D Modeling, Technical Drawings, and Design for Manufacturing in Solidworks and Onshape

FEA and CFD in Solidworks and COMSOL

Programming in Python, C++, Matlab, Javascript, SQL

PID Control, Path Planning, Inverse Kinematics, State Machines, PCB Design

PROJECTS (See Portfolio for details)

Internal Structure of NASA Lifting Body

Autonomous Robot Dog

Redesigning Parts for Manufacturing

Cryogenic Acoustic Model for Superconductor Quench

Two Link Serial Arm

RELEVANT CLASSES

Robotics and Control Theory
Electromechanical Systems
Materials and Manufacturing
Thermal and Fluid Systems
Human Factors Engineering
Engineering Dynamics
Computing in Engineering

AWARDS

Summa Cum Laude

National Merit Scholar