## ISAAC DOBIE

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#### **EDUCATION**

## Massachusetts Institute of Technology

Class of 2027

B.S. in Mechanical Engineering — GPA: 5.0/5.0

Cambridge, MA

Relevant Coursework: Design & Manufacturing I, Numerical Computation, Dynamics & Control I, Mechanics of Materials I, Electronics for Mechanical Systems, Intro to CS & Programming, Designing for the Future

## **EXPERIENCE**

AutoStore

June 2025 - Aug. 2025

Salem, NH

Solution Consulting Intern

- · Worked with the AI Solutions team to incorporate machine learning into AutoStore's data analysis platform.
- · Built a machine learning model and the corresponding application to predict and optimize robot performance.

#### MIT Mission Innovation X

Sep. 2024 - Present

Undergraduate Researcher

Cambridge, MA

- · AI researcher working on analysis and evaluation software for flight test education and development.
- · Presented initial findings as a team to the MIT Office of Innovation and the U.S. Air Force.

# Quible & Associates P.C. (Acquired by WithersRavenel) Engineer Intern

May 2024 - Aug. 2024 Powells Point, NC

- · Used AutoCAD to design site plans and other client-facing models.
- · Completed on-site leakage tests and inspection reports.

## MIT Civil & Environmental Engineering

Undergraduate Researcher

Jan. 2024 - Aug. 2024

Cambridge, MA

- · Built a dataset of 50k+ demolished buildings in the U.S., and an associated algorithm to match addresses in tax data sets, demolition data, and new construction building permits.
- · Co-author to a paper in the publishing process: Lifetimes of Demolished Buildings in U.S. and European Cities.

## KJ Construction & Remodeling

Jan. 2019 - Aug. 2023

Construction Worker

Kitty Hawk, NC

- · Developed a wide range of trade skills including: carpentry, demolition, painting, insulation, flooring, repairs, power tool use, and heavy equipment operation.
- · Trained and mentored my younger brother in the construction industry.

#### **PROJECTS**

## Six-Axis Desk-Sized Robotic Arm (Current)

June 2025 - Present

- · Designing and fabricating an original desk-sized 6-axis robot arm.
- · 3D printed frame, servo motors, arduino nano controls, photoresistor-activated autonomy.

#### 2.007 Design Competition

Feb. 2025 - May 2025

- · Built an autonomous robot to compete in the 2.007 design competition.
- · Arduino Nano Autonomy, CNC Mill & Lathe machining,
- · Advanced to the top 8 competitors out of 150+; Hot air Balloon Award for an elegant and effective robot.

#### **SKILLS**

**Programming** Python, R, C++

Machining CNC Mill, Lathe, Power Tools

CAD SolidWorks, AutoCad

#### LEADERSHIP & INVOLVEMENT

Men's Varsity Basketball: Team Captain, 2024 Rookie of the Year, 2025 Academic

Sep. 2023 - Present

All-Conference

Sigma Chi Fraternity: Risk Manager, House Manager, Work Week Manager, Summer

Sep. 2023 - Present

House Manager, Annotator, Brotherhood Chair
MIT Undergraduate Practice Opportunities Program: Member

Sep. 2024 - May 2025

Brass Rat Investments: Education Program Member MIT Office of the First Year: Orientation Leader Sep. 2024 - Dec. 2024 Apr. 2024 - Sep. 2024

MIT Energy & Climate Club Launchpad: Business Analyst

Feb. 2024 - May 2024