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## EDUCATION:

### Massachusetts Institute of Technology (MIT) Cambridge, MA

- Candidate for Bachelor of Science Degree, Major in Mechanical Engineering May 2027
- GPA: 3.44
- Relevant Coursework: Classical Mechanics 1-2, Calculus 1-2, Differential Equations, Materials and Mechanics 1, Dynamics and Controls 1, Intro to Solid State Chemistry, Intro to CS Programming In Python,
- Current Coursework: 2.004 Dynamics and Controls 2, 2.007 Design and Manufacturing 1, 2.086 Numerical Computation for Mechanical Engineers

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## EXPERIENCE:

### ARRK for SAFOS UROP with Dr. Martin Culpepper

**Boston, MA**

*MIT UROP*

March 2024 – November 2024

Ongoing project to develop and enable the SAFOS system by Lincoln Laboratory.

- Working on the Adjustable, Re-Lockable, Robust, Kinematic (ARRK) mounting system, a kinematic coupling for a satellite optical sensor.
- Designed and developed flange to keep constant pressure and engagement of the Kinematic coupling's actuators.
- Researched and developed methods of testing Kinematic Coupling accuracy, using a Kinematic Coupling test rig. First prototype and Final product will be finished by end of 2024.

### First Robotics (FTC) Competition Team [The Craft Academy]

**Morehead, KY**

*Leadership and Build Team Leader*

October 2022 – April 2023

- Designed and assembled autonomous and remote-controlled robot for the purpose of stacking cones on "junctions" while competing against other robots. Team 20694 placed within the top ten of Kentucky competitions.
- Acted as member of Leadership Team and Build Team. Assisted in designing robot chassis and assembling chassis and linear slides for robot.

### Leadership and Accomplishments:

- Acted as mediator between Build, Public Relations, and the Programming team of previous robotic team.
- Awarded the Citizenship Award for Class of 2023 of the Craft Academy for leadership and inclusiveness.
- Achieved Distinction in Professionalism for the LEVEL UP: Experience Your Future 2022-2023 at MSU.
- Awarded the Lockheed Martin STEM Scholarship.

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## COMMUNITY SERVICE:

### The Craft Academy for Excellence in Science and Mathematics at Morehead State University (MSU)

*Student*

- Coordinated with other Craft Academy students on rebuilding and restoration of the Hazel Green Academy in Hazel Green, KY 2021 –2023.
- Build-A-Bed: Assembled pre-built beds for the outreach program.

### Little Leatherwood Church of God of Prophecy (Little Leatherwood COGOP)

*Church Member*

- Assisted with back to school and Christmas shopping through home Church 2017 – 2020.
- Packaged and delivered with Thanksgiving and Christmas food boxes through home church 2017 - present.

### Team Kentucky: Eastern Kentucky Flood Relief

*Community Member*

- Assisted after the Flooding of Southeastern Kentucky in 2022 July and August 2022.

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## SKILLS:

### Proficient in:

- AutoCAD --- EMM 103 Engineering Drawing
- SolidWorks --- EMM 203 CAD I, EMM 215 CAD II
- CAM (HSMWorks)
- Public Speaking --- COMS 108 Fundamentals of Speech Communications
- Conflict Resolution
- Leadership
- Fundamentals of Python, HTML, JavaScript, CSS, and web design
- Basic Roofing experience.
- Lathe, Water jet, CNC-Mill, Hand Tools