

Evelyn M. James

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Third-year mechanical engineering student with experience in manufacturing, process, and project engineering. Searching for research & development or test engineering internship beginning summer 2024, where I can leverage my problem-solving skills, curiosity, and adaptability.

EDUCATION

Michigan Technological University | Houghton, MI

BS Mechanical Engineering

Expected May 2025

GPA: 3.76 | Departmental: 3.55

PROFESSIONAL EXPERIENCE

Assistant Project Engineer Intern | Granger Construction

May 2023 – Aug. 2023

- Compiled LEED documentation to achieve 9 points towards Silver LEED certification
- Recorded progress of jobsite by tracking sub-contractor work to present at weekly meetings with owners & architects
- Prepared close-out documentation to present the owner to begin building operations

Engineer Intern | Parker-Hannifin

May 2022 – Aug. 2022

- Handled prototype processing and plating tests to improve FPY of high running products from 30% to 96%
- Conducted time studies to improve cost-roll accuracy for 5 of the 13 studied add-on processes
- Transitioned bar-marking department to ISO-certified processes by creating and implementing standards of work
- Modelled vibratory bowl in Inventor to design and fabricate devices for content orientation, resuming product run

Engineer Apprentice | Racine Metal-Fab

July 2020 – Aug. 2021

- Improved NPI process by updating an integral 7-step laser-turret Pascal program into a 4-step process
- Processed new products in ERP Workwise, SolidWorks, Sigma Nest, and Excel for production
- Communicated with shop floor, project engineers, customer service, and quality assurance daily
- Inspected product quality to uphold customer cosmetic standards and tolerances and decrease PPM
- Trained 2 apprentices in manufacturing engineering and manufacturing procedures

PROJECT EXPERIENCE

V.I.T.A.L.S. Research – team of 2

Aug. 2023 – Present

Project: Mimic the ear canal by using kalimba keys to reduce vibrations read by sensor

- Ideate, design, collect data, and test fixture layouts with laser vibration sensor to find most efficient design

Multiplanetary Innovation Enterprise – team of 4

Aug. 2023 – Present

Project: Test Trencher robot and collect data to improve design and publish in technical documentation

- Research and document regolith compression and use data to test robot depth of cut

Mechanical Engineering Practice II – team of 4

Jan. 2023 – May 2023

Project: Design a crane safety link to fail at a set force, in accordance with engineering and customer requirements

Project: Stabilize an AHU, accounting for disturbances in mass airflow using the ASME MFC-3M-2004 standard

- Scheduled weekly team meetings to keep team on track for timeline of project and quality of work
- Created MatLab programs to streamline calculations and present data graphically
- Collected data with LabView, simulated with SimCenter 3D, and analyzed data for trend

RetroPi Arcade – team of 2

April 2019 – May 2021

Project: Build a 4-player arcade machine using Raspberry Pi with joystick and button controls with a wooden frame

- Designed frame and accessories in Inventor following size constraints and tolerances
- Assembled frame, wired electronics, soldered wires, crimped connectors, and edited existing Python program

Portable Light Cart – team of 1

July 2020 – Aug. 2020

Project: Produce new light cart to aid cosmetic inspection addressing operator feedback for ease of use

- Designed mobile light cart made of 80/20 T-slot in SolidWorks with pin & R-clip fastening for angles and heights
- Wired light switch and overhead light to electric cord and assembled 3 light carts

LEADERSHIP

Engineering Learning Center Coach | Michigan Technological University

Aug. 2023 – Present

- Assist students in their understanding of statics, dynamics, material mechanics, and thermodynamic

LEAP Leader | Michigan Technological University

Aug. 2022 – Apr. 2023

- Assisted 3 professors in lecture sessions of the engineering fundamental courses
- Facilitated weekly classroom session of 24 students to further their understanding of MatLab and collaborative skills

COMMUNITY INVOLVEMENT

Community Service Club Lead | St. Albert The Great Campus Ministry

Apr. 2023 – Present

- Organize community service opportunities and cooperated with community organization

Maker Space Coach | Michigan Technological University

Aug. 2021 – Apr. 2023

- Maintained safe workshop for students to learn and use tools, and guided students in 3D modeling software & printing

INTERESTS

Archery | Crochet | Designing | Ceramics | Swing Dance | Coaching | Art | Hiking | Sewing | Reading