LUKAS MORRIS

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EDUCATION

Syracuse University, College of Engineering & Computer Science **Expected Graduation: May 2026**
Master of Science, Mechanical and Aerospace Engineering

Syracuse University, College of Engineering & Computer Science **Graduation: May 2025**
Bachelor of Science, Mechanical Engineering **GPA: 3.4**
Selected Coursework: Computational Fluid Dynamics, Energy Conversion, Manufacturing Processes, Machine Design

WORK EXPERIENCE

SU Industrial Assessment Center, *Lead Energy Analyst,* Syracuse, NY **May 2022 –Present**

- Led energy assessments and authored corresponding reports for local manufacturers by assembling and guiding project teams of four analysts and up to seven NYPA-sponsored interns from a workforce development program. Delivered solutions to local manufacturers that conserve energy usage and operational costs.
- Managed office operations for a U.S. Department of Energy-funded program, overseeing 15 analysts, allocating resources, training staff, maintaining client relationships, and ensuring deadline-driven timeline oversight for smooth daily operations.
- Updated website content with HTML and CSS to reflect current program offerings, re-engineered backend functionality, and integrated a JavaScript plugin to improve data handling and user experience.
- Oversaw the delivery of $780,000 in annual energy savings through 72 assessment recommendations, averaging 28% reductions in facility energy costs.

Soft Materials (SyFy) Lab*, Researcher,* Syracuse, NY **May 2024 – August 2024**

- Reverse-engineered designs to construct a radial stretching apparatus, contributing to a project that explores the relationship between water particles, material stretching, and heat transfer for microelectronic cooling applications.
- Optimized part fits and tolerances through iterative prototyping and testing to assure proper assembly and functionality.
- 3D printed and procured components; collaborated with machinists to fabricate laser-cut parts.
- Explored integration of an Arduino-controlled small stepper motor system to incorporate torque and tension control for the testing apparatus.

TRIO Student Supportive Services*, Tutor,* Syracuse, NY **November 2022 – May 2023**

- Supported the university's mission of student retention and success by assisting first-generation or low-income students.
- Explained calculus, electrical engineering, and programming concepts in a clear, accessible manner.

Linklings LLC*, Junior Web Developer*, Saint Johnsbury, VT **May 2022 – August 2022**

- Contributed to a company-wide initiative to reduce webpage load times from 40+ seconds to under 2 seconds across all web pages.
- Implemented webpages that display confidential client information using a combination of Python, HTML, and CSS.

ENGINEERING APPLICATIONS

Hyper Xpress Condulet*, Project Leader*, Syracuse, NY **August 2024 - Present**

- Led a team of four colleagues to construct an innovative conduit solution in collaboration with Eaton Corporation.
- Proposed and headed a conduit hub design that eliminates conduit threading requirements before installation, streamlining user experience and minimizing installation time.
- Integrated facility material and manufacturing constraints into solutions, minimizing capital costs associated with the new product. Created prototypes using third-party aluminum 3D printers.
- Named inventor on an invention disclosure submitted for internal IP review.
- Oversaw finite element analysis simulations to determine theoretical part performance.
- Conducted research into international engineering standards, hazard-protected design, and materials analysis.

SKILLS

Technical: SolidWorks, Microsoft Suite, Soldering, Arduino, 3D printing, Troubleshooting
Programming: MATLAB, Python, R, MySQL, Git, HTML, CSS
Laboratory: Oscilloscopes, Multimeters, Calipers, Force Gauges, Universal Testing Machines

AFFILIATIONS/ACHIEVEMENTS

Syracuse University, *Research Assistant* **August 2025 - Present**
U.S. Department of Energy, *IAC Certificate of Achievement* **August 2025**
Syracuse University Mechanical Engineering Capstone, *Boeing Award* **May 2025**
American Society of Mechanical Engineers, *Member* **August 2022 - Present**
Institution of Mechanical Engineers, *Member* **August 2022 - Present**