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**
Awards: Dean's List (3 Semesters)
Selected Coursework: Energy Conversion, Computational Fluid Dynamics, Manufacturing Processes, Heat Transfer, Machine Design, Control Systems

WORK EXPERIENCE

SU Industrial Assessment Center, *Lead Energy Analyst,* Syracuse, NY **May 2022 –Present**
- Managed teams of cross-functional teams of engineers to conduct comprehensive energy assessments for small and medium sized manufacturing facilities
- Provide assessment reports to clients with strategic solutions to conserve energy usage and reduce operational cost
- Personally lead four assessments, each managing a team of four energy analysts
- Established and maintained client contact, team communication, project timelines, resource allocation, and client expectations

Squishy & Flowy Matter (SyFy) Lab*, Researcher,* Syracuse, NY **May 2024 – August 2024**
- Constructed a radial stretching apparatus by reverse engineering another design to explore the relationship between water condensation, material stretching, and heat transfer for applications in microelectronic cooling
- Optimized part fits and tolerances through iterative prototyping and testing to assure proper assembly and functionality, contributed to development of integrated Arduino controlled rotary motion for reliable stretching capabilities
- 3D printed and procured precision components, collaborated with machinists to fabricate laser-cut parts

TRIO Student Supportive Services*, Tutor,* Syracuse, NY **November 2022 – May 2023**
- Supported university's mission of student retention and success by aiding students who predominately fall into first generation or low-income student categories
- Explained Engineering, Calculus, and Programming concepts to in a clear, accessible manner
- Mentor students to develop better study habits and maintain clear lines of communication myself for flexible assistance

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**
- Lead a team of four colleagues responsible for constructing a conduit joint connection in collaboration with Eaton Corporation to eliminate the need for electricians to thread conduit before installation, streamlining user installation
- Proposed and headed a design which integrates a clamping mechanism, which wedges teeth into conduit piping
- Conducted extensive research into international engineering standards, hazard protected design, and materials analysis

Solar Pannel Energy Effectiveness Prediction*, Student Project*, Syracuse, NY **November 2024 – December 2024**
- Analyzed solar energy potential for a residential site using location-specific solar insolation data. Calculated optimal solar panel tilt and azimuth angles to maximize energy capture throughout the year
- Determined household electricity consumption patterns and matched system production to electrical system usage requirements

SPECIALIZED SKILLS

Technical: SolidWorks, Microsoft Suite, Soldering, 3D printing, Troubleshooting
Programming: MATLAB, Python, R, MySQL, Git, HTML, CSS

AFFILIATIONS/LEADERSHIP

American Society of Mechanical Engineers, *Member,* Syracuse, NY **August 2022 - Present**
Institution of Mechanical Engineers, *Member,* Syracuse, NY **August 2022 – Present**