
JONATHAN L. BAUGHEY

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PROFESSIONAL SUMMARY

Motivated mechanical engineering undergraduate with hands-on experience in manufacturing, logistics, and technical process development. Skilled in mechanical design, testing, and validation, with proficiency in SolidWorks, machining, and process optimization to support engineering initiatives. Strong analytical and problem-solving abilities complemented with data science, AI/ML applications, and statistical analysis to enhance engineering decision-making. Collaborative approach with cross-functional teams, technical writers, and skilled trades to drive operational improvements. Actively refining leadership and communication skills through involvement in fraternal organizations and professional experiences. Committed to leveraging engineering expertise, technical acumen, and data-driven insights to contribute to innovative and high-impact projects in a dynamic industry.

EDUCATION

Bachelor of Science in Mechanical Engineering (minor in Data Science) | The University of Toledo - Toledo, OH | May 2027

- GPA: 3.53

Undergraduate Research Assistant | University of Toledo Mechanical Engineering Department | 03/2025 – Current

- Conducting research in Computational Fluid Dynamics (CFD) with a focus on turbulence modeling, utilizing Linux-based environments and open-source meshing tools such as SolidMesh to refine design geometries and perform simulation testing within CFD platforms.

Member, American Institute of Aeronautics and Astronautics | 04/2024 – Current

Member, American Society of Mechanical Engineers | 08/2023-Current

High School Diploma | Clinton High School - Clinton, MI | June 2022

- STEM Curriculum with advanced classes in Physics, Mechanics and Electricity & Magnetism
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SKILLS

CFD Simulation | Microsoft Word | SAS | SolidWorks | Microsoft Excel | Python | Linux | MATLAB | Metal Fabrication | Mechanical Design | CAD Modeling | Manufacturing Processes | Quality Control | Troubleshooting & Repair | Process Optimization | Technical Writing | Logistics & Supply Chain | Predictive Maintenance | Data Analysis | Team Collaboration

WORK HISTORY

Project Engineer Intern, LogistiQ, 01/2025 - Current

- Developed and implemented animated instructional materials for back shop operations using Adobe Premiere and SolidWorks Composer, reducing training time and improving operational efficiency in technical processes.
- Leveraged SolidWorks and custom models to build clearer communication and reduced errors in manufacturing workflows.
- Improved communication by collaborating closely with a science and technical report writer, ensuring accuracy and clarity in conveying complex engineering concepts.
- Optimized Automated Divert to Aisle (ADTA) conveyor performance by conducting testing and validation with test packages, identifying and troubleshooting system inefficiencies that improved throughput and reliability.
- Gained hands-on logistics engineering experience, contributing to process improvements and technical documentation while working in a dynamic manufacturing and automation environment.

Manufacturing Technician, American Soy, Saline, MI, 06/2023 - 08/2023 and 06/2024 - 08/2024

- Operated and maintained high-speed manufacturing lines for low-and high-acid aseptic food processing, ensuring consistent product quality and regulatory compliance while minimizing downtime.
 - Managed quality control processes, including production date and lot verification, reducing product inconsistencies and ensuring compliance with industry and safety standards.
 - Enhanced equipment reliability by assisting skilled trades teams in predictive maintenance and unscheduled repairs, leading to a measurable reduction in unplanned downtime and maintenance costs.
 - Optimized production efficiency by utilizing machining and troubleshooting skills to diagnose and resolve equipment issues, resulting in improved workflow continuity and reduced waste.
 - Drove process improvements by collaborating with cross-functional teams, including maintenance and quality assurance, streamlining operations and enhancing overall manufacturing efficiency.
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LEADERSHIP & ACTIVITIES

Chaplain, Ohio Iota Sigma Phi Epsilon Chapter, 12/2023 - 11/2024

- Led and facilitated the chapter's standards board, ensuring adherence to fraternity policies, core values, and ethical standards while fostering a culture of accountability and integrity. Oversaw and organized fraternity rituals and policy implementation, ensuring the preservation of traditions while reinforcing brotherhood, leadership, and personal development among members.
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COMMUNITY ENGAGEMENT

Volunteer, Sunshine Community Service

- Engaged with individuals with developmental disabilities, providing support and companionship through community activities such as bowling, golf, and vocational tasks to enhance social inclusion. Assisted in community service projects, including trash pickup and facility upkeep, fostering a clean and supportive environment for residents and staff.
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AWARDS & HONORS

- **Sigma Phi Epsilon** – Executive Board Chaplain, demonstrating leadership and governance within the fraternity
- **Lambda Sigma Sophomore Honor Society** – Recognized for academic excellence and leadership as a sophomore honors student.
- **SeaPerch Underwater Robotics Competition** – **5th Place Overall, 1st Place Presentation** - showcasing technical and problem-solving skills in robotics engineering
- **Member, Jesup Scott Honors College** – Recognized for academic achievement and intellectual engagement