SUMMARY

I am a driven 4th-year student at the **University of Wisconsin-Madison** pursuing a multidisciplinary education in **Applied Mathematics**, **Engineering**, **and Physics** (AMEP). My journey has been enriched by diverse practical engagements, encompassing manufacturing engineering, quality engineering, research & development, along with adeptness in data analysis and programming. This unique fusion of rigorous academic proficiency and hands-on practicality positions me as a versatile and invaluable contributor to dynamic professional teams.

EDUCATION

B.S. Applied Mathematics, Engineering, and Physics ~ AMEP at University of Wisconsin-Madison, May 2025

- GPA: 3.00
- [Fall, 2021] Honor's List
- [Spring, 2023] Madison Experimental Mathematics Undergraduate Research

RESEARCH

Madison Experimental Mathematics Research Lab

- [Spring 2023] Stimulant misuse among college students https://mxm.math.wisc.edu/
- https://tylerjonesworkspace.com/research

EXPERIENCE

Engineering Intern, Cadence Inc., June 2023-August 2023

Sturgeon Bay, WI

- Manufacturing Engineering: Learned plastic injection molding and metal stamping intricacies. Helped streamline operations by engineering custom parts, implementing automation, and standardizing lean manufacturing methods. Collaborated with a dynamic engineering team and gained insights from tool-making facilities across Wisconsin.
- Quality Engineering: Engineered precision inspection fixtures via SOLIDWORKS which aided my understanding of meticulous evaluation processes. Improved detailed drawing interpretation and innovative design (OEM) for medical prototypes following the industry's standards.
- Research & Development: Collaborated to enhance manufacturing cells via lean methods, boosting work order efficiency from 76.77% to 129.69% and production quality from 89.4% to 98.48%. Diagnosed, experimented, and engineered various solutions for optimized performance by 3D modeling and collaborating thoroughly with toolmakers/engineers.

CNC Machinist, Midland Plastics Inc., January 2022-January 2023

De Pere, WI

Gained technical proficiency as a CNC operator, crafting precise parts with tight tolerances. Managed/corrected G-code, tooling, and machining techniques, contributing to smooth operations. Conducted post-CNC tasks like deburring, heat polishing, and chemical welding. Operated exclusively with Haas Automation machines, including advanced 5-axis machining methods.

Custom Equipment Design Intern, Tweet/Garot Mechanical Inc., June 2021-August 2021 De Pere, WI

Applied SOLIDWORKS/Inventor skills for time-sensitive drawings and 3D models, gaining insight into sheet metal fabrication tailored towards the food and beverage industry (conveyors, platforms, and food processing equipment). Utilized Autodesk Inventor, Vault, and NASTRAN. Collaborated on enhancing food/beverage industry processes, contributing to a ~154% sales boost (\$2.4M to \$3.7M) in the Custom Equipment Design team.

SKILLS

Mathematics: Experimental Research • Applied Mathematical Analysis • Numerical Analysis (MATLAB) • Data Analysis Engineering: SolidWorks • Inventor • NASTRAN • Detailed

Drawings • Solid Modeling • Excel • CFD

Computer Science: MATLAB • Java • Python • EES

Machining: Design for Manufacturing • CNC • Mastercam • Error-correcting G-code

WEBSITES

My Career/Academic Odyssey: https://tylerjonesworkspace.com

LinkedIn: www.linkedin.com/in/tyler-jonesuw