# **Tyler Jones**

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# SUMMARY

I am a driven 4th-year student at the University of Wisconsin-Madison pursuing a multidisciplinary education in Applied Mathematics, Engineering, and Physics. 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.

### **SKILLS**

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

Drawings • Solid Modeling • Excel

Computer Science: MATLAB • Java • Python • EES •

Computational Fluid Dynamics

Machining: Design for Manufacturing • CNC • Mastercam •

Error-correcting G-code

## **EXPERIENCE**

Engineering Intern, Cadence Inc., June 2023-August 2023 Sturgeon Bay, WI

- Manufacturing Engineering: Immersed in plastic injection molding and metal stamping intricacies. Expertise refined in streamlining operations through engineering finesse, automation, and lean methods. Collaborated with dynamic engineering team and gained insights from tool-making facilities.
- Quality Engineering: Crafted precision inspection fixtures, delving into meticulous evaluation processes. Mastered blueprint interpretation, innovative design, and teamwork for medical prototypes, aligning with stringent standards.
- Research & Development: Collaborated to enhance manufacturing cell, boosting work order efficiency from 76.77% to 129.69% and production quality from 89.4% to 98.48%. Diagnosed, experimented, and engineered solutions for optimized performance.

# CNC Machinist, Midland Plastics Inc., January 2022-January 2023 De Pere. WI

Worked at Midland Plastics, a premier Midwest plastics supplier in New Berlin, WI. Thrived as a CNC operator, skillfully crafting precise parts within tight tolerances. Proficiently 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 Inc Machines, including advanced 5-axis capabilities.

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

Interned at Tweet/Garot Mechanical, a leader in process equipment design and manufacturing. Applied SOLIDWORKS/Inventor skills for time-sensitive drawings, gaining insight into sheet metal fabrication. Enhanced communication through daily interactions and goal-driven meetings. Utilized Autodesk Inventor, Autodesk Vault, and NASTRAN for tasks. Collaborated on enhancing food/beverage industry processes, contributing to a ~154% sales boost (\$2.4M to \$3.7M) in Custom Equipment Design team.

### **EDUCATION**

Bachelor of Science

Applied Mathematics, Engineering, And Physics ~ AMEP, University of Wisconsin-Madison, Madison, WI

- GPA: 3.10
- [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 using a SEIR model https://mxm.math.wisc.edu/
- https://tjjones6.github.io/AMEP\_Workspace/research.html

#### **WEBSITES**

My Career/Academic Odyssey: https://github.com/tjjones6/AMEP\_Workspace/settings/pages

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