

Jacob Sheley

615-970-0595

Jacobrsheley@gmail.com | Jrs1445@msstate.edu

EDUCATION

Mississippi State University

Bachelor of Science in Mechanical Engineering

GPA: 3.79/4.00

President's List (2021 and Fall of 2023)

Dean's List (2022, Spring of 2023 and 2024, Spring 2025)

Expecting to Graduate December 2025

GOALS: I am looking for a full-time position in an automotive or manufacturing related field following my graduation in December of this year.

CAREER/WORK EXPERIENCE

Sandman Designs Machine Shop - Hendersonville, Tennessee - (Summers of 2020-2024)

- Operated Haas CNC and manual mills and lathes for manufacturing car parts and accessories
- Performed maintenance and cleared error codes for CNC machines
- Modified g-code to increase cycle time by 15-20% with faster feed and adjusted spindle rates

IDEE and Paccar Machine Shop Student Worker – Starkville, Mississippi - (January 2024-Current)

- Manage the shops and train other students to use the machines properly
- Designed and built a plastic injection molding machine
- Machine custom parts for Formula and Baja competition teams
- Fix and upgrade machines in the shop

Paccar Engine Company Co-Op – Columbus, Mississippi - (August 2024-December 2024; May 2025-Current)

- Tested new cutting tools and investigated discrepancies between different parts and machines to identify and solve issues, improve first time yield, and reduce costs (up to 40%).
- Tested new bolts (main bearing cap) to address reports of the old bolts breaking in the field
 - Verified bolt elongation, clamping force, and mitigating risks associated with the new bolts
- Learned about lean manufacturing, six sigma, and how to increase through put in an industrial environment

CERTIFICATIONS/SKILLS

- | | | |
|--------------------------------------|----------------------------|---------------------|
| • SolidWorks Associate Certification | • 3D Printing | • Polishing |
| • Osha 10 Certification | • Computer Aided Design | • Injection Molding |
| • 3 and 5 axis Machining | • Computer Aided Machining | |
| | • Welding | |

NOTABLE ACCOMPLISHMENTS/PROJECTS

- Project Manager for Mississippi State's Manufacturing club for the SEC Machining Competition (2023)
 - 2nd Place overall
 - I did the CAM for different parts and optimized other's programs to reduce run time (up to 50%), maintain a clean surface finish, and reduce chatter, delegated responsibilities to other team members, and did the machining in the competition
- Project Manager for high school B.E.S.T Robotics team competition (2019 and 2020) – Founders Award for Creative Design (2019), 3rd Place in local competition (2019), 1st Place in local competition (2020), 2nd Place "BEST" award (2020)
- Built, flew, and repaired racing drones
- Converted a mountain bike into a custom electric bike capable of 23 miles an hour
- Play on the MSU club baseball team (2023 - Current)
- Member of the MSU Advanced Manufacturing Club (2023 - Current)