# David Polkabla Jr

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#### **OBJECTIVE**

Mechanical Engineering senior at Northern Arizona University, eager to apply hands-on experience in design and analysis to drive innovation in engineering solutions. Seeking full-time employment opportunities post-graduation to contribute to impactful engineering projects.

#### **EDUCATION**

Northern Arizona University – Flagstaff, AZ Bachelor of Science in Mechanical Engineering Expected Graduation Date: May 2025

### SKILLS

- Technical Tools: SolidWorks, ANSYS, MATLAB, Microsoft Office
- Engineering Skills: Product design, CAD modeling, Stress analysis, Prototyping, Mechanical systems
- Soft Skills: Team leadership, Problem-solving, Project management, Customer service, Time management

### **PROJECTS**

## Senior Capstone Project - SAE Baja Competition | Ongoing

- Leading the Steering and Brakes sub-team in designing and building components for the 2025 SAE Baja Competition.
- Developing designs using SolidWorks, ensuring components meet performance and safety criteria.
- Conducting stress and safety analyses using ANSYS to optimize system functionality under harsh conditions.

## Junior Writing Project - Active Aerodynamic Spoiler Design | Spring 2024

- Collaborated with a team to design an aftermarket active aerodynamic spoiler for use on various car models.
- Analyzed material stresses and production costs, balancing performance with affordability.
- Utilized SolidWorks and ANSYS for mechanical and aerodynamic simulations to improve downforce and vehicle stability.

#### **EXPERIENCE**

Bill's Machine Shop 5/2023 - 8/2023

Show Low, Arizona

Shop Assistant
Assisted with disassembly, cleaning, and reassembly of engine heads and blocks.

- Gained experience in mechanical systems and assembly techniques.
- Ensured that equipment and tools were properly maintained and organized for efficient workflow.

CAL Ranch05/2022 - 08/2022Freight Crew MemberShow Low, Arizona

Stocked and faced shelves, assisted customers, and built in-store displays.

- Developed teamwork and time management skills while handling freight and ensuring store organization.
- Provided customer service in product selection and troubleshooting.