

JAKOB WERLE

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EDUCATION

Temple University

Bachelor of Science in Mechanical Engineering

Philadelphia, Pennsylvania

Expected Graduation – Spring 2024

PROFESSIONAL EXPERIENCE

ANZE Suspension

Junior Race Engineer

Jupiter, Florida (Remote/Traveling)

May 2022 – Present

- Assisted lead engineer in spotting & data collection in pit box during race sessions
- Debriefed drivers post race to quantify vehicle handling through turn phases
- Reviewed lap data using Stars telemetry software and video footage
- Developed suspension adjustments for F1600 & F2000 cars utilizing driving data & debrief feedback
- Performed string-alignments, shock set-downs, and other setup procedures in time critical setting

Temple Formula Racing FSAE

Electrical Member ← add bullet for placing 15th

Philadelphia, Pennsylvania

Sept 2023 – Present

- Generated electrical schematic to integrate ECU, CAN bus, & 20+ sensors using Rapid Harness software
- Implemented standardized wiring harness construction procedure which closely aligns with military specifications
- Solved reliability failures by analyzing the current and voltage draw of critical electrical components
- Worked with team to create calibration for MoTeC data logging and EFI engine controller system

talk about using lambda and map to create baseline map for vol. eff. map

President/Chief Engineer

June 2021 – June 2022

- Lead team to break school record by placing 29th at FSAE Michigan design competition,
- Managed the design, fabrication, and testing projects of 7 vehicle subsystems, consisting of 50+ members
- Strategized with business team to expand the \$75,000 team budget by obtaining company partnerships
- Promoted team inclusion by organizing both fundamental & advanced level educational workshops

Suspension Lead Engineer

June 2020 – June 2021

- Spearheaded major suspension design overhaul from 13" to 10" wheel platform
- Wrote python code to optimize vehicle handling by analyzing vehicle dynamics and tire behavior
- Designed suspension linkages and wheel assemblies to achieve precise kinematic parameters using SOLIDWORKS
- Fabricated wheel assemblies using Fusion360 CAM & HAAS CNC mill & lathe

December 2023

NDI Engineering

Mechanical Engineer

Thorofare, New Jersey

June 2022 – Present

- Administrated completion of drawing package for department by tracking production and communicating with customer
- Provided engineering support to technical manual development team
- Prepared GD&T installation drawings for temporary system alteration of Ohio & Columbia class submarines
- Performed tensile and torsional mechanical testing threaded inserts and gimbal assembly

Mishimoto

Design Engineering Intern

New Castle, Delaware

May 2021 – August 2021

- Reverse engineered radiators, boost-control valve, & charge pipes to improve cooling performance & power
- Validated strength of modular tow-hook using SOLIDWORKS simulation
- Communicated directly with vendors to integrate manufacturing criteria into designs

TECHNICAL SKILLS

- Software:* Python, Git, MATLAB, MoTeC EFI calibration, SOLIDWORKS, Fusion 360, Flux PCB, Rapid Harness
- Hardware:* HAAS CNC machining, TIG welding, metal fabrication, Oscilloscope, 3D scanning

CREDENTIALS

- United States Government Security Clearance → reduce distance between lines June 2022
- Certified SOLIDWORKS Associate (CSWA) - Mechanical Design May 2020
- Certified SOLIDWORKS Associate (CSWA) - Simulation April 2022
- Eagle Scout - Boy Scouts of America August 2018
- Level 1 Alpine Certification - Professional Ski Instructors of America (PSIA) February 2021