Jakob Werle

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Education

Temple University **Philadelphia, Pennsylvania**
Bachelor of Science in Mechanical Engineering *Expected Graduation – Spring 2024*

Professional Experience

ANZE Suspension **Jupiter, Florida (Remote/Traveling)**
Junior Race Engineer *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 **Philadelphia, Pennsylvania**
Electrical Member *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 data logging and EFI engine controller system

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 parternships
- 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

NDI Engineering **Thorofare, New Jersey**
Mechanical Engineer *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 **New Castle, Delaware**
Design Engineering Intern *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 — *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*