

Jacob R. Parkhurst

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Mechanical Engineer Profile

Meticulous, diligent, and goal-oriented professional with a passion for leading mechanical projects and restoring vintage vehicles. Deft at directing teams and devising employee-centric plans to increase organizational efficiency. Ability to perform design work through 3D modeling and simulations. Equipped with good work ethic and thrives under complex working environment. Articulate communicator with extraordinary interpersonal, relationship-building, strategic / analytical thinking, and management skills. Technically proficient in MS Office Suite, AutoCAD, MATLAB, Siemens NX, Autodesk Inventor, Smartsheet, and LabVIEW.

Areas of Expertise

- ◆ Engineering Research
- ◆ Design Controls
- ◆ Regulating Compliance
- ◆ Testing & Debugging
- ◆ Product Management
- ◆ Team Leadership & Management

Education

B.S. Mechanical Engineering (2021) (GPA: 3.6)

Missouri University of Science and Technology, Missouri S&T

Professional Experience

PACCAR, Mount Vernon, WA

2021 – Present

Advanced Powertrain Engineering Intern

Lead data analysis tasks on Super Truck II program to push the boundaries to achieve 51% brake thermal efficiency of a diesel engine. Created a MATLAB script that would take raw data from the test cell and perform high level calculations to show results in readable manner.

- Validated Simulations of multi-cylinder engine to real world testing data to ensure target BTE was achieved.
- Presented findings from data analysis to the team consisting of people from around the world and made suggestions to reach the efficiency goal.
- Created timeline for engine test cell operations.

Missouri S&T – Formula SAE Team, Rolla, MO

2018 – 2021

Chief Engineer and Vehicle Dynamics Lead

Directed procedures for designing and testing of formula car, while adhering to SAE's procedures and compliance. Designed un-sprung wing mounting through finalization of motion and FEA simulations. Developed and implemented new mode of knowledge transfer to regulate procedures.

- Led transitioning to new carbon fiber monocoque in liaison with engineering team.
- Planned and designed cooling system with 17% better performance, resulted in achieving fourth position in world-wide team competition.
- Attained less than .01 psi pressure difference between radiators through configuration of tube routing.

Fike Corporation, Blue Springs, MO

2019 – 2020

Co-op Mechanical Engineer

Adhered to regulatory compliance to design pressure relief devices in accordance with customer needs / demands. Identified and analyzed customer's product returns to finalize reports.

- Achieved 93.5% of service requests within time for seamless working operations.
- Increased efficiency of manufacturing team through development of customized tooling.
- Liaised with engineering team to complete 88.7% of service requests on-time.