LUCAS WILSON
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MECHANICAL ENGINEER

Experienced Mechanical Engineer with a strong background in automotive product design, advanced fabrication, sourcing, and diagnostics. Proven expertise in CAD design using SolidWorks and Fusion360, and hands-on experience with various manufacturing processes (injection molding, CNC machining, forging, casting, 3D printing). Demonstrated leadership in project management, quality control, root cause analysis, and supplier collaboration.

EXPERIENCE

DORMAN PRODUCTS – Colmar, PA
Mechanical Engineer I | June 2023 – Present

- Develop and optimize aftermarket automotive components while ensuring design for manufacturability (DFM) and compliance with industry standards.
- Utilize SolidWorks to create detailed CAD models and technical drawings, incorporating GD&T principles.
- Perform DFMEA evaluations and collaborate with cross-functional teams (engineering, quality, supply chain).
- Work with new and existing vendors across multiple countries to establish manufacturing processes, assess production capabilities, and ensure compliance with quality and performance standards.

EXTREME ULTRAVIOLET TECH (EUVTech) – Martinez, CA
Engineering Intern | July 2022 – August 2022

- Assisted in the manufacturing and assembly of high vacuum components in a cleanroom environment.
- Gained hands-on experience with precision machining using mills and lathes

HOUSE OF MOTORRAD – Boulder, CO
Mechanic / Lead Mechanic | May 2021 – June 2023

- Managed motorcycle rentals and provided technical leadership by training staff in diagnostics, repair, maintenance, and custom modifications.
- Quoted insurance companies and provided repair estimates for post-collision repair, honing skills in forensic analysis and quality assessment.
- Implemented a new inventory system, increasing parts availability and reduced downtime, demonstrating effective process improvement and project management.

EDUCATION

UNIVERSITY OF COLORADO – Boulder, CO
Bachelor of Science in Creative Technology and Design, May 2023

- Major in Creative Technology and Design, College of Engineering & Applied Science
- Overall GPA: 3.2; Major GPA: 3.9
- Developed a high-endurance, on/off-road motorcycle for an engineering capstone project.

SKILLS

Technical Skills:

- **CAD & Modeling:** Advanced proficiency in SolidWorks and Fusion360; experience with 3D printing and completion of the SolidWorks CSWA certificate.
- **Manufacturing Processes:** Injection molding, machining, forging, casting, additive manufacturing.
- **Quality & Process Improvement:** DFMEA, GD&T, design for manufacturability (DFM), root cause analysis.
- **Software:** Microsoft Office Suite (Excel, Word, PowerPoint, Outlook), Linux, Docker, Proxmox, Visual Studio.

Personal & Leadership Skills:

- Efficient and creative problem-solver with a hands-on approach.
- Strong project management and people leadership skills; experience training and guiding teams.
- Excellent customer service and supplier relationship management.

ADDITIONAL PROJECTS

- Developed and working on building an open-source quadruped robot along with custom designed motor controller PCB’s among other personal engineering projects.
- Maintains a portfolio website (WilsonFabrication.com) hosted on a self-built high-availability server.