

STRENGTHS

-  **Innovative Thinking**
Consistently suggested fresh ideas that improved project outcomes, driving performance improvements in design phases.
-  **Collaboration**
Fostered productive relationships across teams, ensuring clarity and unity in project objectives—trusted by peers for effective teamwork.
-  **Technical Expertise**
Demonstrated depth of knowledge in mechanical principles, earning trust from supervisors for critical project decisions and innovations.
-  **Problem Solving**
Addressed complex issues in design processes, leading initiatives that eliminated bottlenecks and enhanced project efficiency with focused creativity.
-  **Mentorship**
Actively guided junior engineers, building their confidence and skill set in both collaborative settings and independent projects.

SKILLS

- CATIA V5
- Solidworks
- ANSYS
- MATLAB
- Project Management
- Manufacturing Processes
- Design Validation
- Regulatory Compliance
- Team Collaboration
- Vehicle Dynamics
- Technical Communication
- Suspension Systems
- Material Selection
- Testing Procedures

SUMMARY

Detail-oriented Wheels & Tires Engineer with a Bachelor’s degree in Mechanical Engineering and extensive hands-on experience in chassis design and suspension systems. Proven track record developing high-performance wheel and tire architectures for SUVs and off-road vehicles. Skilled in utilizing CAD software, particularly CATIA V5, for designing 3D models and 2D drawings. Strong analytical skills in validation testing and regulatory compliance, committed to enhancing vehicle durability and performance. Eager to join a forward-thinking company and contribute innovative solutions towards advancing automotive technology.

EXPERIENCE

Wheels & Tires Engineer

Automotive Innovations Group  June 2024 - Present  Detroit, MI

As a Wheels & Tires Engineer, led various projects focusing on wheel systems for high-performance vehicles including SUVs and off-road models. Engaged in the entire engineering process from conceptualization through production while ensuring adherence to safety and performance standards. Directed collaborations with suppliers and multifunctional engineering teams, delivering innovative solutions aligned with business objectives.

- Led the design and development of wheel systems, ensuring alignment with performance and durability targets.
- Utilized CATIA V5 to create detailed 3D models and 2D drawings for tire interfaces and integration of TPMS sensors.
- Collaborated with cross-functional teams to facilitate seamless integration of wheel and tire systems with braking and suspension components.
- Developed specialized off-road tire technologies, enhancing performance and durability in challenging terrains.
- Conducted comprehensive validation testing to meet Federal Motor Vehicle Safety Standards (FMVSS) and SAE performance criteria.
- Provided mentorship to junior engineers, fostering a collaborative team environment and knowledge sharing.

Junior Engineer

Precision Vehicle Dynamics  August 2022 - May 2024  Lansing, MI

In this role as a Junior Engineer, contributed extensively to the development and optimization of tire and wheel systems across diverse vehicle models. Collaborated with senior engineers on key designs while gaining substantial experience in regulatory compliance and technical project execution.

- Assisted in the design and testing of tire and wheel systems for various vehicle models, focusing on performance optimization.
- Supported the creation of 2D and 3D design drawings using CAD software, ensuring adherence to engineering standards.
- Participated in the development of validation plans, contributing to the testing of tire durability and performance metrics.
- Collaborated with senior engineers to identify and resolve technical challenges in wheel and tire design.
- Engaged with suppliers to communicate specifications and requirements for custom tire compounds and wheel designs.
- Contributed to design reviews and project milestones, ensuring timely delivery of engineering components.

LEADERSHIP & AWARDS

- Six Sigma Certification received in 2025
- Employee of the Month at Automotive Innovations Group, recognized for outstanding project contributions on July 2025

Supplier Management

3D Modelling

LANGUAGES

English Native

Spanish Proficient

MY CAREER



● Wheels & Tires Engineer at Automotive Innovations Group (2.2 Years)

● Junior Engineer at Precision Vehicle Dynamics (1.8 Years)

EDUCATION

Bachelor's Degree in Mechanical Engineering

University of Michigan 🎓 GPA: 3.8 📅 2022 📍 Ann Arbor, MI

Coursework: Chassis Dynamics, Suspension Design, Materials Science, Fluid Mechanics

CERTIFICATIONS

- Six Sigma Certification 📅 2025
- Certified CATIA V5 Specialist 📅 2025

TECHNICAL SKILLS

- **CAD Software:** CATIA V5, Solidworks
- **Engineering Analysis Tools:** ANSYS, MATLAB
- **Performance Testing Methods:** Durability Testing, Dynamic Testing, Compliance Testing
- **Compliance Standards:** FMVSS, SAE
- **Project Management Tools:** JIRA, Asana
- **Communication Tools:** Microsoft Teams, Slack
- **Operational Methodologies:** Agile, Waterfall
- **Supplier Management:** Vendor Evaluation, Contract Negotiations, Quality Control
- **Validation Strategies:** Test Plans, Risk Assessment, Feedback Mechanisms
- **Data Analysis:** Statistical Software, Excel Analytics

PROFESSIONAL AFFILIATIONS

- Member of Society of Automotive Engineers (SAE)
- Volunteer Mentor for local engineering students, providing guidance and support

ADDITIONAL INFORMATION

Work Status : Authorized to work in United States. No sponsorship required.

REFERENCES

AVAILABLE ON REQUEST