
TECHNICAL EXPERIENCE

Engineering Design Services, Intern (Sep/25-Present)

- Designed complete HVAC systems in AutoCAD, producing detailed 10-page technical reports for Professional Engineer (PE) review
- Performed site inspections at four project locations to verify proper installation and compliance with mechanical design specifications
- Developed, optimized, and evaluated HVAC, fire protection, and plumbing layouts to enhance system performance, efficiency, and code compliance

Baja SAE Lead Test and Drivetrain Engineer (Aug/24 - May/25)

- Analyzed, designed, and manufactured an off-roading vehicle with a team of ten, ensuring adherence to design specifications
- Improved testing by conducting over twenty individual test cases while effectively analyzing, documenting, and communicating the data
- Successfully implemented drivetrain goals such as selectable differentials, 25MPH top speed, and ensured ease of vehicle maintenance by designing a removable transmission cover
- Generated 50+ detailed SolidWorks drawings incorporating GD&T, BOMs, and tolerance stack-up analysis
- Created 20+ structured test cases, documenting and analyzing results to identify root causes of performance issues
- Authored, revised, and executed test plans using SMART (Safe, Measurable, Attainable, Repeatable, Testable) goals, incorporating safety measures and clear validation steps

Daimler North America Systems Validations Intern (Jun/22 - Aug/22)

- Automated data mining with custom CANape scripts to detect -20°C oil temperature conditions, enhancing cold chamber test analysis
- Learned about vehicle testing by driving semi-trucks in a dirt quarry in Oregon and observing professional data taken via computers
- Consolidated and presented test findings in Excel-based dashboards, enabling data-driven decision-making for system validation teams
- Collaborated with validation engineers to identify root causes of system issues and recommend design improvements for reliability

EDUCATION

University of Colorado, Boulder (Aug/21 – May/25)

Bachelor of Science in Mechanical Engineering

- 2nd place in people's choice award for senior design project
- Society of Women Engineers Member

Griffith University, Gold Coast, Queensland, Australia (Feb/24 – Jun/24)

- Planned and executed a self-directed study abroad term at Griffith University
- Designed, prototyped, and manufactured a carbon-fiber steering wheel for the Griffith Formula SAE Team
- Excelled in Digital Manufacturing, Heat and Mass Transfer, Materials and Manufacturing, and Digital Modelling for Design

Saddleback Community College, Orange County, CA (Jun/20 – Jun/21)

Automotive Fundamentals Certification

Global Seal of Biliteracy in Spanish

VOLUNTEER EXPERIENCE

Sandy Feet Initiative Surf Instructor (May/20-present)

- Instruct and mentor 20 children with diverse disabilities in adaptive surfing techniques, promoting confidence, water safety, and inclusion

Architectural implementation volunteer - Puebla, Mexico (May/25)

- Directed a team to interpret and implement architectural plans, serving as a translator between designers and local masons
- Coordinated tasks for five volunteers to ensure accurate rebar and brick placement across a 300 sq. ft. construction area

Growth International Volunteer Excursions (GIVE) construction assistant and teacher - Tanzania, Africa (Aug/23)

- Received a letter of appreciation from the Founder, Jake Allison

Volunteer construction team member - Ensenada, Mexico (Jun/19)

- Built a house for a member of the community with Pacific Coast Church

SKILLS

CAD & Simulation

- SolidWorks, AutoCAD, Revit, Fusion 360, Material Magics, Engineering Equation Solver, BILD, Ansys, FEA analysis

Programming & Data

- Microsoft Office, Python, C++, MATLAB, CANape, MoTeC, oscilloscope, multimeter, function generator

Manufacturing:

- 3D Printing, MIG welding, lathe, mill, CNC machining, CNC programming, laser cutter, grinders, metalworking, carbon fiber layup

Documentation & Teamwork

- SOPs, cross-functional collaboration, meeting facilitation, design reviews, report writing, CAD file management

Mechanical Design Principles

- Design for Assembly (DFA), Design for Manufacturing (DFM), Design for Testability (DFT), safety compliance