

## Objective

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Recent graduate with mechanical engineering degree and experience in the automotive industry looking to transition into the aerospace industry in the state of Texas. Proven ability to apply scientific and engineering principles to design, develop, test, and evaluate products and projects as a whole.

## Technical Competencies

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Fabrication, Machining, and Design	Perform Calculations based on Theoretical Principles
Modeling - Pro Engineer / Creo, FEA (Abaqus)	Understanding of Mechanical, Thermal, and Hydraulic Systems
Geometric Dimensioning and Tolerancing	Understanding of Electromechanical systems
Instrumentation	Presenting and Reporting
Data analysis	Training, Mentoring, Working in Team Environment
Project Management	Microsoft Office (Word, Excel, Project, PowerPoint)

## PROFESSIONAL EXPERIENCE

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### PROJECT ENGINEER *current job*

*dates...*

Responsible for Gasoline Engine Testing and Development Projects

- Lead instrumentation of thermocouples, pressure transducers, control signal monitoring, flow meters, current probes
- Lead data acquisition setup, conduct all testing
- Analyze and validate all data through scientific and engineering theory and reasoning
- Research new technologies and apply to current products / projects
- Developed excellent problem solving skills by working with cutting edge technologies
- Perform calculations based on mechanical, fluid, thermodynamic, and electrical principles as necessary
- Complete combustion, thermodynamic, and electrical energy / power consumption analysis and evaluation of each engine
- Manage & executed projects, coordinate scheduling, prioritize tasks, generated cost effective and efficient test plans
- Present and report all data internally and externally to customers
- Knowledge of government regulations for safety and emissions
- Debug & troubleshoot engines and instrumentation
- Work closely with team members and supervisors; train new employees

Projects:

- Gasoline engine benchmarking / testing / development projects
- Alternative fuel testing and calibration
- Design and optimize intake and exhaust systems for maximum performance.
- Research - *Provide expertise on market trends for advanced engines and advanced technologies to customers*

### DEVELOPMENT ENGINEER *previous job*

*dates*

Responsible for Development of New Performance Products from Design Concept through Prototyping and into Production.

- Performance product development required complete understanding of system integration, engine operation, and electrical control strategies.
- Turbocharger kit design, integration, installation ; Power Module Development; Both Diesel and Gasoline Engines
- Speed Limiters / delimiters ; Emission System Elimination; Both Diesel and Gasoline Engines

## RELATED COURSEWORK

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### Undergraduate Studies

- *Sr. Design Formula SAE Project (Engine Team Leader):*
- *Junior Design (Team Leader):* Design and manufacture robotic crane according to design specifications.
- *Advanced CAD/CAM:* Pro Engineer, Creo, Solidworks
- *Finite Element Analysis:* Stress/Strain and failure analysis using ABACUS software
- *Machine Analysis:* Calculate stresses, strains, loads, etc. in a mechanical gearbox
- *Heat Transfer • Machine Analysis • Fluid Mechanics • Manufacturing Systems • Materials • Thermodynamics I & II*

## EDUCATION

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MSME Program at .... School .... – In progress

BS Mechanical Engineering – school....