MECHANICAL DESIGN ENGINEER INTERN

Summary

Over 2 years of combined professional and educational experience in 3D Modelling and Product Design 1 year of hands-on experience in FEA, Stress Analysis, Numerical Modelling and Static / Dynamic Analysis Certified in Product Design / Analysis, Engineering Mechanics and OCTG Researched in the fields of CFD and Design of Heat Transfer Mechanisms Internship experience as Maintenance Engineer Well rounded Professional with a passion to innovate and improve performance / quality

Highlights

- 3D Modelling, Product Design, Statistical Analysis, Design of Experiments Stress analysis, Structural analysis - Trusses, Frames, Finite element analysis (FEA), Heat Transfer, API, DNV, ASME, Machining, Manufacturing
- Software Skills
- Hands-on Experience: AutoCAD, AutoDesk Inventor, Pro Engineer, Creo, MicroStation, SolidWorks, Catia V5, Matlab, Ansys, Pipesim, Orcaflex, Comsol, Pipesim, Microsoft Office - Excel, Access, Outlook, PowerPoint, Visio, Microsoft Project
- Working Knowledge: OLGA, PTC Windchill Quality Solutions, PLM, Simulink, MathCAD, PLC Programming, LabVIEW, PeopleSoft, SAP, SQL, C, Python, LINUX
- Operating System: Windows XP, Windows 7, Windows 8, Mac OS, Chrome OS, Android, iOS, BIOS

Accomplishments

- Enhancement of condensation in a Heat Exchanger prototype.
- Project Scope - Designed and Fabricated a Shell & Tube Heat Exchanger - ProEngineer Pipeline Simulation, Design and Optimization of field production using Flow Assurance strategies - Pipesim* FEED and Stress Analysis of Subsea pipeline system- WG Kenny Project * CFD Analysis of flow inside and over pipelines to improve offshore drilling mechanisms - Ansys Fluent Design, CFD Analysis and Optimization of a Computer Heat Sink to maximize Heat Transfer Rate - COMSOL * Design and Analysis of a Press Tool Prototype - ProEngineer and Ansys Mechanical Chassis and Exterior Designer of National Go Kart Championship 2013, India - Catia V5, Pro/E and Ansys Key Competencies AutoCAD, ProE and SolidWorks - 5 years ANSYS - 2 years Finite Element Analysis - 2 years Product Design and Analysis - 1 year.

Experience

September 2014
to
August 2015
Company Name City , State Mechanical Design Engineer Intern

- Subsea Pipeline 'S lay' installation analysis using DNV OS F101 Drilling Riser Design for High current environment.
- Experience in Recoil, Hang off and Drift off analysis Steady State Multiphase Flow Simulation of pipelines using Pipesim considering Flow Assurance Strategies Designed 3D models of Subsea Systems using SolidWorks package Analyzed the mechanical systems including FEA for Structural and Fatigue Delivered a Drilling Riser design document in 3 days that usually takes 1-2 weeks Standardized MS Excel template to expedite the design calculation process in few hours that would take days Recommended efficient design to reduce cost while manufacturing Gained an overall knowledge pertaining to 3D Modelling, Product Design, OCTG, Project Management, Project Engineering, Stress Analysis, Wall thickness evaluation and Tension force calculations Gained experience in applying various industry codes for offshore oil and gas projects.
- Conversant with the Flow Assurance Strategies, pipeline analysis codes: API RP 2A, API RP 1111, DNV-OS-F101, ASME B31.8, DNV-RP-F110, DNV-RP-E305, DNV-RP-F101; riser analysis code: API-RP-2RD and drilling riser analysis code: API-RP-16Q.

January 2014
to
June 2014
Company Name Fitness Zone Attendant

- Certified in First Aid and Emergency evacuation.
- Enforced safety policies and assisted customers during workout sessions.
- Acknowledged for communication skills while interacting with people from different nationalities.
- Emerged as a strong professional balancing rigorous work schedules and academics.

June 2011
to
August 2011
Company Name Maintenance Engineer Intern

- Investigated operations and maintenance problems of Heat Exchangers and Refrigerators Monitored, Analyzed and Initiated actions for increasing efficiency of operation Studied P&ID's, Wiring Diagrams and Manuals and recommended economic maintenance solutions Developed prototype of a heat exchanger with an integrated hydrophobic coating that costed $10 per foot Succeeded in increasing the condensation rate by 27%, making it more environment friendly Proposed a model that was 21% compact and 22% ($18k) less expensive, that performs equally well in comparison with present heat exchangers Submitted a report with scope for improvement in innovative design and reduced cost.

Education

Dec 2014

CGPA Master of Science : Mechanical Engineering GPA: GPA: 3.274/4 Mechanical Engineering GPA: 3.274/4

8/10 May 2013

University of Houston Main Campus - Texas CGPA Bachelor of Engineering : Mechanical Engineering Mechanical Engineering

Anna University India

Skills

3D, Ansys, API, AutoCAD, C, Catia, communication skills, Design of Experiments, First Aid, LabVIEW, LINUX, Machining, Mac OS, MathCAD, Matlab, mechanical, Access, MS Excel, Excel, Microsoft Office, Outlook, PowerPoint, Microsoft Project, Windows 7, Windows 8, Windows XP, MicroStation, oil, OS, Operating System, PeopleSoft, PLC Programming, PLM, policies, Pro Engineer, Product Design, Project Management, Python, Quality, safety, SAP, Simulation, SolidWorks, SQL, Statistical Analysis, Visio, Wiring Diagrams