
CAREER SUMMARY

- Mechanical engineer with almost two years of work experience working with an oil and gas equipment manufacturer.
- Major strength in CAD modelling, design, research, technical writing and quality systems management.
- Initially hired as a draftsman involved in design and manufacture liaison then became involved in authoring technical documents.
- Due to excellent performance, versatility, and proactivity, became promoted as an Engineering Officer to improve and look after the Inspection Services division of the company.

EDUCATION

2010 - 2013

Bachelor of Engineering (Mechanical)
Second major in **Heavy Mechanical Engineering**

Queensland University of Technology,
Brisbane, Australia

Course **GPA 6.594** on a 7 point scale

THESIS TOPIC

*Development of an Efficient Solar
Drying System (2013)*

A final year paper that work towards developing an efficient solar dryer for drying of agricultural products. A simulation model is created in MATLAB to determine the performance of the solar drying system under various conditions and configurations.

Skills and knowledge developed

- Research skills
- Analytical skills
- Solar energy
- Collaboration skills
- Design simulation
- Mathematical modelling
- Numerical computing and programming
- Formal and detailed report writing

PUBLICATIONS

"Mathematical model of counter flow v-grove solar air collector".
World Renewable Energy Congress: Renewable Energy for Sustainable Development and Decarbonisation, 14-18 July 2013, Murdoch University, Western Australia

"Comparison of direct and indirect cooling in an SCO₂ Brayton cycle for concentrated solar power plants". *17th IAHR International Conference on Cooling Tower and Heat Exchanger*, 7-11 September 2015, Gold Coast, Queensland, Australia

SKILLS DEVELOPED THROUGH PROJECTS AND ASSIGNMENTS

- Computer skills
 - Demonstrated ability in using 3D CAD modelling (**Solidworks**)
 - Familiarity in finite element analysis and computational fluid dynamics (**ANSYS**)
 - Sound knowledge in numerical computing and programming (**Excel and MATLAB**)
- Communication skills
 - Demonstrated good communication skill both verbally and in writing by achieving a grade of credit to high distinction in technical reports and presentations
- Technical skills
 - Successfully designed a 2-stage transmission system and its lubrication method
 - Knowledgeable in heat transfer processes and general thermodynamics
 - Demonstrated knowledge in plant and process design as well as heat exchanger design and piping systems

CAREER HISTORY

Jan 2016 – Mar 2016
Engineering Officer
OSMAC Inspection Services
Brendale/Chinchilla QLD

- Interpretation of various international standards for inspections (i.e DS1, API, ISO)
- Providing technical assistance in the Engineering Department
- Writing and implementing work instructions and manuals
- Establishing a quality management system to ensure all inspections are performed to the highest standards
- Ensuring that all inspection equipment are in good condition and calibrated
- Managing the Inspections team and assisting in completion of reports
- Designing a Process Improvement Program to achieve *lean* inspection

May 2014 – Dec 2015
Mechanical Draftsman
OSMAC International
Brendale QLD

- Creation of BOM and 3D CAD drawings (*Inventor*) according to API standards and other related specifications such as ASME, ASTM and ISO
- Checking of manufacturing procedures and stamp details prior to manufacture
- Preparing of material specifications, heat treatment requirements and coating and surface hardening specifications.
- Writing technical procedures such as pressure testing, NDE requirements as per API and relevant standards.
- Conduct design verification and calculations to ensure product integrity and compliance with ASME requirements using Mathcad
- Creating API Design Packages for every API product manufactured
- Maintain technical documents and prepare monthly management and performance report for the engineering department

Nov 2012 – Feb 2013
R&D Mechanical Intern
Hydrexia Pty Ltd
Yeerongpilly QLD

- Developed competency in 3D CAD modelling
- Acquired familiarity in conceptual design and layouts of control system components and piping
- Recommended process improvements and innovation

VOLUNTEERING EXPERIENCE

2013 – Present **Musician (Acoustic and bass guitar)**
Hope Centre North Brisbane Extension – Stafford QLD

References

Dr. Azharul Karim (QUT)
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Scott Passlow (OSMAC)
Operations Manager
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