Usama Ijaz

Mechanical Engineer

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EDUCATION

University of Engineering & Technology, Lahore

B.S. Mechanical Engineering- CGPA 3.78/4.00

Secured Merit-Base Scholarship

Punjab Group of College, Pattoki Campus

F.Sc. Pre-Engineering- 957/1100 (87%)

Awarded with Full-Fee Concession Scholarship

Oct 2014-Jul 2018

Oct 2012-Apr 2014

Jun 2017-Jul 2017

INTERNSHIPS EXPERIANCE

Engro Fertilizers, Daharki

Maintenance Internee

- Assisted and observed plant workers performing daily duties like inspection and maintenance
- Studied Plant PFDs and PNIDs and acquired great knowledge of plant components and processes
- Participated in office meetings and prepared office reports and presentations
- Negotiated with Orient Engineering Services Regarding the purchase of injection pumps

PROJECTS, LEADERSHIP AND TEAMWORK EXPERIENCE

Developing the MATLAB Code to Determine Hydrodynamic Entrance Length of 2D Channel Numerical Methods Class Project, 6th Semester (University)

- Lead the group of 4 fellow students
- Lead the group by assessing each member's abilities and interests accordingly assigning them roles
- Mentored group members regarding the basics of project, research work and report writing
- Succeeded in developing MATLAB code, consequently generating results and drawing conclusions

Performance Assessment of Loop Heat Pipe (LHP) using Computational Fluid Dynamics Final Year Project, 7-8th Semester (University)

- Assumed leadership role and directed fellow group members regarding their duties and tasks
- Performed tasks like research, project simulation and analysis, thesis writing
- Succeeded in developing a simple 2d model of LHP and analyzing the Fluid Flow Phenomenon

Fault Tree Analysis of Under-Performing Alum Dosing Pump at Water Treatment Plant Internship Project, Engro Fertilizers

- Gather Pump data by communicating with personals from different departments
- Researched working of dosing/injection pump its working, composition, limitations, etc.
- Performed FTA based on gathered data to establish reasons for pump underperformance
- Recommended different possible short/long term solutions for the problem

VOLUNTEER EXPERIENCE

- Assisted in research work for ethanol engine project under the supervision of ASME, UET
- Performed Industrial Visits to Sabro Technologies (HVACR) and Abdullah Sugar Mills
- Assisted Fellow Students group in their FYP regarding Thermoacoustic Refrigeration
- Worked as Freelancing Design Engineer for 1 month to improve my design, simulation, analysis skills

COMPUTER SKILLS

- Skilled at using MS office, ANSYS Workbench, Solid Edge, AutoCAD
- Moderately proficient in using Solid Works, MATLAB, C++ Language