Shaddi Ali
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SUMMARY

Highly motivated and responsible individual, interested in learning new subjects and a strong interest in product design and development. I am a quick learner and adapt well to new environments and cultures.

EDUCATION

University of Massachusetts (UMASS), Amherst, MA

- Bachelor of Science in Mechanical Engineering 2013
  Relevant Courses: Human Factors Engineering, Deterministic Operations Research, Statistics, Engineering of Wind power Systems, Manufacturing Processes, Design of Mechanical Systems I, Mechanical Engineering Automatic Controls; Dynamic Systems Modeling, Analysis and Simulation

WORK EXPERIENCE

JUDD WIRE INC. Turner Falls, MA
Design and Applications Engineer Summer Intern 2012

- Responsible for Integrating design standards, material, and manufacturing standards to a single standard master document
- Gained knowledge of ISO, SAE, Ford, GM, and Chrysler standards for wire manufacturing
- Created User-friendly menu using SQL and Visual Basic for wire layout construction and all of the associated testing requirements
- Presented Project progress at weekly engineering meetings
- Completed Master Document currently in use by company resulting in significant reduction in man hours and related costs required to create testing reports

ACADEMIC PROJECTS

Design of Water Jet cutter tank abrasive removal system Amherst, MA
Senior Design group Project 2013

- Designed, fabricated, and tested an eductor system which reliably and effectively removed 2 tons of garnet abrasive from the bottom of a Water Jet cutter tank
- The design uses a high pressure nozzle to generate a high velocity fluid jet. This jet, when fired into the slurry in the water jet tank, drags the nearby fluid with it, due to viscosity
- Tested different prototype solutions made in SolidWorks, 3D Printed and machined to provide physical and analytical proof of concept
- Conducted detailed engineering analysis using Bernoulli's equation of conservation of energy through the nozzle and conservation of momentum after the nozzle using Mathcad

Porsche manufacturing plant, Amherst, MA
Junior Engineering Project 2011

- Performed feasibility studies and analysis of new plant.
- Deigned layout of production to maximize efficiency using CAD
- Designed a plant with a profit margin of 12.5% annually

Study of aircraft velocity versus fuel flow rate, Amherst, MA
Engineering MatLab Project 2011

- Initialized flow rates for simulation by placing speeds and runs into vectors
- Coded a Bisection method to find equilibrium air speed
- Configured a While loop to reach the maximum number of iterations
- Plotted velocity versus mass flow rate

ACTIVITIES

UMass Men's Track and field, Amherst, MA
High Jumper 2009

- Lead the team to win the 2009 A10 Championship

SKILLS

- MatLab, CAD, Pro E, Ansys, MS Excel, Word, Power Point, SQL, Visual Basic, LabView
- Fluent in Arabic