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| DSC04403.JPGAREAS OF EXPERTISE*Process Engineering**Oil and Gas* *IT skills**Aspen Modeling**Quality Analysis**DCS**Triconex*PROFESSIONAL*NEBOSH Oil and Gas**(Certification)*PERSONAL SKILLS*Dynamic**Enthusiastic**Team Player**Problem solver* | MohammedMohammed.366683@2freemail.com Chemical EngineerPERSONAL SUMMARYExceptionally focused and skilled Chemical Engineer with excellent academic record. Excellent knowledge and interest in Process Modeling and Controls in the Oil and Gas Industry. Familiar with Health and Safety Practices in the IndustryCurrently looking for a job opportunity in a challenging environment, and with a forward thinking employerACADEMIC QUALIFICATIONSM.Eng.Sc Chemical Engineering***Lamar University, USA 2013-2014 (GPA 4.00)****Thesis:* ’ Process Simulation for A New Conceptual Design of LNG Terminal Coupling NGL Recovery and LNG Re-gasification for Maximum Energy Savings.’B.Tech Chemical Engineering***National Institute of Technology, Warangal, India 2008-2012***WORK EXPERIENCE***Mihir Consulting LLC, Houston TX, USA***PROCESS ENGINEER June 2015 – Nov 2016* Develop dynamic simulators for engineering studies and training using Unisim Design.
* Examining the P&IDs and PFDs, and marking up all the desired process pipelines, equipments, valves, controllers and Distributed Control System (DCS) points for the simulation model
* Modeling the major Process Equipments; Including Towers, Heat Exchangers, Fuel Gas system, Furnaces, and Compressors based on the design specifications.
* Validating the modeling results with the desired Mass and Energy balance.
* Reviewing the Start up and Shutdown Procedures of the plant and examining the process dynamics.
* Lead in modeling the Paraxylene process plant; Including the Hot and Cold sections.
* Modeled the Acid Gas Pre-heater furnace for the Sulfur recovery unit system; Familiarized with the SRU process plant.
* Emulated the plant wide control configuration and ensured that the DCS (Honeywell’s TDC3000) and Safety Interlock system software management is adequate
* Implemented Compressors Anti Surge Control system (CCC), and Furnaces ESD configurations
* Provides Control Systems support, basic administration of DCS and PLC systems including monitoring and upkeep of applications
* Reviewing the HAZOP and LOPA studies to ensure that the operability and safety procedures are followed while carrying out Alarm Rationalization for the plant.
* Responsible for completion of all the documentation and technical reports.
* Liaising with client on a regular basis to ensure the successful completion of the project to agreed budgets and time frames.
* Travel to various customer sites for kick off meeting, acceptance testing and installation as well as collaborative engineering work.

***Dan F Smith Dept of Chemical engineering, Lamar University, Beaumont, TX USA***RESEARCH ASSISTANT Jan 2013 – May 2015* Built a steady state model for a newly developed LNG terminal on Aspen.
* Develop heat and material balances; develop draft PFD’s and P&ID’s process control and logics for the plant.
* Carried out Equipment sizing for the Sieve tray distillation column and the flash drums used in the model.
* Implemented Heat Integration techniques to reduce the overall utility usage; Developed condenser/reboiler heat exchange network across the plant.
* Developed the Dynamic model using Aspen dynamics with conventional PI controllers, Designed effective control strategy that could handle major Feed disturbances in the LNG plant and fulfill the safety concerns.
* Assisted in developing a dynamic model for a Crude distillation unit tower using Aspen HYSYS and PRO II.
* Assisted in developing a simulation model for vapor recovery from crude storage tank through ejectors using Aspen HYSYS

***Indian Institute of Chemical Technology (CSIR) Hyderabad, India***JR. RESEARCH ENGINEER May 2011 - Jul, 2011* Worked in a Pilot plant; analyzed the production of Hydrazine Hydrate by peroxide process.
* Designed and Implemented plant equipment upgrades to lower production costs, and increase the yield and efficiency of main product lines.
* Prepare and execute Lab experiments to improve the yield of Ketazine through a CSTR reactors
* Prepare test samples and participate in day to day product quality analysis.
* Assisted maintenance and facility issues, and provided support to design for a commercial process.

***Sharjah Cement Factory, United Arab Emirates*** ENGINEERING INTERN May 2010 – Jul 2010.* Assisted in the Quality analysis of the raw materials, raw mix, kiln feed, clinker and cement on hourly basis and calculate the required raw mix compositions, and was part of the schedule to check the physical strength of the cement as per ASTM and BSEN standards.
* Analyzed the production operations and assisted the plant operators to control the plant with Distributed Control System (DCS); Kiln Operations; Ball Mills Operations.
* Provided plant site technical support during critical/unusual operations.
* Performed a study on the Fabric filters used in the factory to reduce the dust emissions.

 ACADEMIC PROJECTS***Neural Network Model for Process data of Distillation column*** (Jun 2013 – Jul 2013)* Analyzed the Process data using graphing techniques to remove bad data and to calculate the missing values.
* Executed Regression analysis on the date using Excel.
* Modeled a neural network for the Product composition using Matlab.

***Simulation and Optimization of Ketene Plant*** (Jan 2013 – May 2013)* Modeled the Ketene plant on Aspen Plus
* Optimized the PFR reactor and increased the purity of the products up to 99%, and maximized the income and profit of the plant with $11,142/hr.

***Simulation and Optimization of Propane Chiller Unit*** (Aug 2013 – Dec 2013)* Carried out Dynamic simulation for the Chiller plant using Pro II and Aspen HYSYS, and the simulation results were compared.
* Carried out Optimization for the amount of Propane refrigerant being used in the plant.

KEY SKILLS AND COMPETENCIESProgramming Skills : JAVA Script, SQL, FORTRAN, HTMLApplication Packages : Aspen HYSYS, MATLAB, Unisim Design, Aspen Plus, Aspen  Dynamics, Honeywell’s DCS (TDC3000), Triconex Auto CAD,  Microsoft Office * The ability to multi-task and work in a stressful, fast-paced environment
* Team oriented, highly organized and efficient.
* Effective communicator with excellent presentation skills
* Resolving complex technical issues and coming up with efficient solutions

REFERENCES – Available on request |