Julie Bellfy

Chemical Engineer

Philadelphia, PA - Email me on Indeed: indeed.com/r/Julie-Bellfy/11326f9fd5b8f87f

Highly motivated chemical engineer with excellent communication and advanced technical skills looking for entry-level engineering role.

WORK EXPERIENCE

Systems Engineer

Trane - King of Prussia, PA - May 2011 to Present

• Use strong organizational and communication skills to develop long-term customer relationships with assigned accounts.
• Design new heating, cooling, and ventilation systems
• Acted as project manager and team leader to achieve goals
• Determine project needs, constraints, and responsibilities to meet all of the customer's HVAC system design and installation requirements.
• Provide knowledge and consultation in the form of developing HVAC system related solutions for the customer's problems, including financial and performance-based considerations.
• Assist customers in answering technical questions on design and implementation of HVAC systems, Trane products, and system application alternative, BAS, building controls, installation, operation, maintenance, and problem resolution
• Assist in the operation and start-up of HVAC systems
• Develop and execute HVAC system designs to address issues of system selection, efficiency, and cost to the client
• Integrated efforts with specialists in other technical disciplines to design HVAC systems for process and cleanroom applications

Co-op Engineer

Merck - Elkton, VA - May 2010 to December 2010

• Mechanical and Chemical Engineering position in Utilities Department at pharmaceutical manufacturing chemical plant
• Audited energy consumption of various systems throughout plant site, self-managed projects and tasks
o Developed HVAC model - Accurately modeled current and future states' energy consumption of site HVAC/ Air Handling units. Required extensive MS Excel and Visual Basic programming
• Provided technical support for the operation of HVAC systems around plant site.
• Future energy consumption model
o Integrated future and current projects to analyze future energy consumption of plant site
o Future projects included: Solar, Wind, and Biomass
o Developed independently with supervision and feedback from superiors

Research Intern

Cornell University - Ithaca, NY - May 2009 to August 2009

• Research experience for undergraduates (REU) in Electrical & Computer Engineering Department at Cornell University
• Independent Research Project performed under the super vision of a professor and doctoral student
• Laboratory Techniques utilized included:

o Photolithography
o Atomic Layer Deposition
o Electron Beam Evaporation
o Furnace Annealing
• Project Title: Cyclic Charging of Redox Markers in MOS Capacitors
o Studied the effects of integrating redox molecules into flash computer memory
• Research presented at The 2009 NNIN REU Convocation
• Listed as an author for the published manuscript, “Integration of Self-Assembled Redox Molecules in Flash Memories” in the scholarly journal IEEE Transactions on Electron devices

EDUCATION

BA in Chemical Engineering

Villanova University - Villanova, PA
2007 to 2011

SKILLS

EMIT certification, project management, chemical engineering, ASPEN, Mathcad, Auto-cad