

Alexander Mesa

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Ambitious, energetic team player with exceptional engineering, math and computer skills seeking a technical position in a challenging, fast-paced environment.

EDUCATION

North Carolina State University, Raleigh, NC

Dec 2017

B.S. Chemical Engineering, Minor in Mathematics, 3.37 (*cum laude*)

- **Senior Design Project:** Researched types of scrubber and selected one to remove HF from the stream. Calculated the scrubber size to convert specified amount of HF based on OSHA standards.
- Thermodynamics, Reactors, Transport/Fluid Dynamics, Controls, Chemical Engineering Labs, Statistics

Coding Boot Camp at UNC Chapel Hill

Apr 2019

- Full stack web development course for making user interface websites and manipulating databases
- HTML, CSS, JavaScript, jQuery, API, Firebase, Node.js, MySQL, Express, Handlebars, MongoDB, React, GitHub, Heroku

PROFESSIONAL EXPERIENCE

Safety Coordinator II, Pfizer, Morrisville, NC

Contract; Feb-May, 2019

- Authored and updated Standard Operating Procedures (SOPs) for Security Officers
- Instructed the Security Officers in Morrisville, Chapel Hill, and Richmond, VA on the SOPs via Webex
- Utilized SharePoint to upload documents/forms and published pages of information
- Facilitated training by organizing security materials such as SOPs, contact lists, and records in booklets

Software Quality Assurance Intern, Sageworks (Abrigo), Raleigh, NC

May-Aug, 2016; Jun-Aug, 2018

- Conducted quality testing of websites using C#
- Converted manual tests into automated scripts which reduced testing time by 300 hours a year
- Troubleshoot and fixed over 100 bugs using automated testing programs

Environmental Health & Safety Intern, Coatings & Adhesives Corp, Leland, NC

Jun-Aug, 2017

- Updated SOPs using Process Instrumentation Diagrams (PIDs)
- Authored safety procedures and spill hazard documents
- Identified potential hazards operators may encounter and recommended preventative measures
- Performed engineering calculations to size up a pump for transferring water in a pipeline

PROFESSIONAL ORGANIZATIONS

Engineers Without Borders

2015-2017

- Designed solar panels for schools in Sierra Leone using AutoCAD
- Calculated panel dimensions and weights that met local building standards
- Contributed in developing sanitation procedures and writing the Guatemala Water Systems Project book

American Institute of Chemical Engineers (AIChE)

2014-2017

- Served as the VP of Records, which involved maintaining attendance and sending email notifications
- Built a hydrogen fuel cell car model in ChemE Car Team and presented the work at the AIChE conference

ADDITIONAL SKILLS

- Programming Languages: Visual Basic, Excel VBA, C++, C#, Java, MATLAB
- Microsoft (Word, Excel, PowerPoint, Access, Outlook), ASPEN, AutoCAD, SharePoint