**Alexander Mesa**

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https://alexandermesa.github.io/MyPortfolio

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
* Troubleshot 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