# ARIANNE MACKENZIE

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### **EDUCATION**

Bachelor of Science in Chemical Engineering, May 2018 University of South Florida, Tampa, Florida College Junior with a GPA of 3.30

#### **Courses included:**

Organic Chemistry I Thermodynamics I&II Fate of Chemicals in the Environment

Heat and Energy Balances Transport Phenomena 1

### RELEVANT EXPERIENCE

## Facilities Management/Engineering Intern, May - July 2015 Central Bank Facilities Management Department, Trinidad and Tobago

- Project lead on implementing an Indoor Air Quality Management system for a 22-storey commercial building.
- Identified the major hazardous components of air coming in through fresh air intakes and improved flow of fresh air by identifying volatile components such as carbon emissions from cars and installation of washable carbon filters and removal of potentially harmful cleaning chemicals from the same room as the main HVAC system
- Project lead on implementing an energy-efficient lighting system.
- Analyzed the current lighting design on a sample floor of the building and managed contractors to conduct energy audits of the system.
- Replaced 75% of the regular lights with Light Emitting Diode (L.E.D.) lighting, as well as control systems that would reduce the use of light where necessary. Also maximized the use of natural lighting in certain areas by rearranging the locations of some employees' desks.

# Engineering/Portfolio Management Intern, May-August 2014, May-June 2013 Novus Tech Limited, Trinidad and Tobago

- Created a database that highlighted general policy frameworks of renewable energy usage in the Caribbean.
- Conducted energy audits of light energy systems in various commercial buildings.
- Helped improve company's networking by making arrangements to attend different EXPO events throughout
  the Caribbean that showcase the latest technologies in solar energy systems and other lighting control
  systems.

### ADDITIONAL EXPERIENCE

- Desk Clerk: Immediately respond to services for on campus residents as well as the Department of Housing. Also provide support and ensure safety of students by efficient and accurate management of keys and card access to residence halls.
- Mail Clerk: Provide internal mail services by sorting and delivering mail, as well as logging and sorting packages. Provide customer services to visitors, including students, parents and other USF staff members.

#### HONORS AND ACTIVITIES

- American Institute of Chemical Engineers, Sampling Science 2017 Director of Advertising (Present)
- SACheE Safety Certificate in Chemical Process Safety and Nitrogen Uses
- Texas A&M International University Women's Golf Team, Athletic Scholarship (2013-2015)
- University Dean's List (2013), Honor Roll (2013-2015), Heartland Athletic Conference Honor Roll (2013-2015)