

# Sabrina Rolz Sandoval

[sabsrolz@umich.edu](mailto:sabsrolz@umich.edu) (734) 263-4676

Permanent Address: 33 W Ontario St Apt 19B, Chicago, IL 60654

## EDUCATION

### University of Michigan

Bachelor of Science in Engineering

**Major:** Industrial and Operations Engineering

**Relevant Coursework:** Data Processing, Economic Decision Making, Probability and Statistics, Optimization Methods, Ergonomics, Markov Processes, Six Sigma Belt, Introduction to Algorithmic Programming

**Award:** Guatemalan Scholarship, Fall 2014-Winter 2018

- An award directed for Guatemalan students, pursuing a degree in science or engineering, which covers cost of international student tuition.

Ann Arbor, MI

September 2014-April 2018

GPA: 3.20/4.00 Major GPA: 3.60/4.00

## CERTIFICATIONS

### Northwestern University Coding Boot Camp

School of Professional Studies

Evanston, IL

July 2019- January 2020

- Six month Full Stack course to acquire the knowledge and skills required to build dynamic end-to-end web applications.
- Program covers browser based technologies (HTML5, CSS, Javascript, JQuery, React.js), database languages (MySQL, MongoDB), server side deployment (MERN Stack), and Computer Science concepts (data structures and algorithms).

## PROFESSIONAL EXPERIENCE

### Morningstar Inc.

*Financial Product Specialist, Commodities and Energy Team*

Chicago, IL

June 2018-Present

- Supports Morningstar's Commodities and Energy enterprise software that provide real time, historical and futures data, through daily client cases.
- Developed data mining techniques by extracting data from our local Oracle Database with the use of SQL and http.client request package in Python.
- Helps clients pull, aggregate and derive data through the scheduling of automated processes in our cloud-based solutions.
- Facilitates client data requests, by working with Vendor Management, Client Relations and Data Operations to help clients acquire access to third party and proprietary data.

### Morningstar Inc.

*Quality Assurance Management Intern*

Chicago, IL

June-August 2017

- Supported the QA team to test the efficiency of different functionalities of the Wealth Forecasting Engine (WFE), which is a major component used for numerous of Morningstar's products and external client products.
- Applied visual representations of the generated data and regression analysis using Excel, Minitab, and R to analyze the distribution and correlation of given variables.
- Participated in a case study concerning the current market competition for major players in the robo advisory industry. Analyzed millennial's investing behaviors and points of interest, such as ESG investing and tech savvy solutions.

### Excellent S.A.

*Production Intern*

San Lucas, Guatemala

July-August 2016

- Worked at a food factory that produces different types of cereal and nutritional supplements. Forecasted sales to determine the amount of agricultural inputs necessary to produce a given quantity of goods.

## PROJECTS

### Morningstar Inc.

*Quantitative Bootcamp*

Chicago, IL

March - April 2019

- Applied statistical inference methods like hypothesis testing and multivariate regression techniques to analyze the relationship between samples of time series financial data.
- Extracted and manipulated data sets with the use of Python modules: Pandas, Numpy, Matplotlib, Scikit-learn and Statsmodels.

### Morningstar Inc.

*Plant Capacity Data Stretch Project*

Chicago, IL

January 2019-Present

- Building an Energy Supply Stack Model to visualize power capacity for different regions and its fluctuations over time.
- Collecting and manipulating raw data from different sources by using different importing and parsing techniques in Python.

### University of Michigan

*Senior Design - Plan for Improved Efficiency of Ford Process Timelines*

Ann Arbor, MI

January 2018-April 2018

- Developed a project management tool to standardize and facilitate the completion of processes involved in launching large scale supply network part distribution warehouses.
- Implemented Six Sigma Methodology to identify the opportunity cost of the project and develop efficient data collection and simulation methods to achieve the goal under a specified time frame.

## LEADERSHIP & VOLUNTEERING EXPERIENCE

### Member of Society of Hispanic Professional Engineers- SHPE

- Engage with Hispanic female community at University of Michigan in professional events like SHPE National Conference.

## SKILLS

**Computer:** Python, HTML5, CSS3, JavaScript, JQuery, React.js, MySQL, MongoDB, Git, Express, Matlab, Minitab, XML

**Language:** Spanish (native), English (fluent)