**SUMMARY**

Motivated analytics professional with strong problem-solving and interpersonal skills, with a proven track record of performing data maintenance and implementing advanced data mining techniques to solve technically complex problems. Detail-oriented, innovative critical thinker dedicated to making a difference through data-driven solutions. Key accomplishments and abilities include the following:

* Performing sophisticated analysis involving large amounts of complex data
* Communicating complex concepts to technical and non-technical audiences
* Working collaboratively with diverse sets of professionals to achieve optimal results

**SKILLS**

* *Technical:* Python, SQL, Apache, Tableau, R, Dataiku DSS
* *Certifications:* Google Analytics Individual Qualification

**EXPERIENCE**

**Cognizant, Parsippany-Troy Hills, NJ**

**Business Analytics and Insights Senior Associate** August 2017 - Present

* Working with a major rental car company to develop three machine learning models in Python and synthesizing the results to predict rental patterns of 4M brand switching customers resulting in a win-back email marketing campaign
* Developing machine learning models in PySpark using real-time car telemetry data to predict car maintenance failures before they occur resulting in optimized car usage across the fleet and overall reduction in maintenance costs per vehicle
* Utilizing a variety of text mining techniques in Python on 45K post-rental survey responses to decipher patterns among positive and negative customer experiences
* Analyzing 25M customers and their 82M rentals through statistical techniques in Python to identify differences between churned and non-churned customers
* Segmenting those 25M customers into five unique clusters using the K-means algorithm in Python to enable the client to send tailored emails and promotions
* Creating bundles of the most popular products purchased together by performing association analysis in R on 35M ancillary product transactions resulting in immediate uplift in online sales

**Thinkful, Remote**

**Data Science Mentor** November 2018 - Present

* Mentoring data science students one-on-one through six-month online academy to develop their analytical skills and become proficient in the full data science stack
* Guiding mentees through content including programming fundamentals, statistical analysis, and machine learning using Python
* Providing students with career coaching and industry best practices to assist their transition into the advanced analytics and data science field

**Graduate School Practicum**

**Northrop Grumman** September 2016 – May 2017

* Investigated specific questions concerning fraud, waste, and abuse such as: DRG upcoding, atypical care patterns, and 30-day readmission rates
* Implemented techniques including data mining, association analysis, regression analysis, and network analysis using R, SQL, and SAS
* Analyzed over 12GB of Centers for Medicare and Medicaid Services (CMS) data containing 2.7 million Medicare claims with approximately 3,400 fields per claim

**PawBoost, Raleigh, NC**

**Data Analyst** December 2016 – August 2017

* Analyzed data sets in Python containing information on over 100,000 lost pets and identified notable patterns, trends, and deficiencies to boost business performance
* Created visualizations in Tableau to communicate meaningful finding to business owners

**Duke Energy (Shearon Harris Nuclear Power Plant), New Hill, NC**

**Design Engineer II** December 2013 – June 2016

* Designed the engineering change product for the number one safety issue at the plant and led a team of diverse professionals through installation and implementation
* Assisted in the creation of the Fukushima flooding inspection document which guaranteed the safety of the plant in the event of a natural disaster

**Duke Energy (Shearon Harris Nuclear Power Plant), New Hill, NC**

**Engineering Intern/Temporary Student Worker** May 2013 – December 2013

* Categorized over 100 De-energized Relays by using 15 pieces of pertinent information for each which led to increased safety
* Generated a descriptive list of all 166 Preventative Maintenance Identification Relay Quantities and evaluated each one for Preventative Maintenance optimization
* Completed Flow Accelerated Corrosion evaluations for the upcoming Refueling Outage which guaranteed the reliability of those piping systems

**Kimley-Horn and Associates, Cary, NC**

**Engineering Co-op Student** January 2012 – May 2012

* Assisted in traffic data collection and modeling to maximize and improve traffic flow for new and existing roads
* Modeled and tracked the fiber optics path for the Microelectronics Center of North Carolina’s project through numerous counties
* Acquired AutoCAD 3D experience through roadway and transportation projects

**EDUCATION**

**Master of Science in Analytics** May 2017

Institute for Advanced Analytics, North Carolina State University, Raleigh, NC

**Bachelor of Science in Civil Engineering**, *magna cum laude* December 2013

North Carolina State University, Raleigh, NC

Honors: Dean’s List seven times, National Collegiate Honor Society

**Università Cattolica del Sacro Cuore** January 2013 – May 2013

Milan, Italy

**VOLUNTEER EXPERIENCE**

**History Colorado Center** January 2019 – Present

* Improving membership retention and fundraising efforts by cleaning up textual mistakes across 2,000 unique records in database system

**Habitat for Humanity, Greater San Francisco, CA** June 2015

* Worked with a team of fellow volunteers to construct homes for at-risk families

**Alternative Spring Break, Costa Rica** March 2012

* Learned with a team about environmental sustainability in the rain forest
* Worked with a local family and learned environmentally friendly farming techniques