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EXPERIENCE **Microsoft**, Redmond, WA / Humacao, P.R.
Data & Applied Scientist II - Anti Piracy Services Feb 2018–Present

Soteria - Security Consulting & Data Analytics, Charleston, S.C.
Data Scientist Jun 2016–Jan 2018

- Developed predictive models to detect Phishing emails and websites based on content and attributes using Python packages such as Scikit-Learn, NLTK and Pandas.
- Built algorithms to detect large scale phishing campaigns with the use of clustering techniques and Natural Language Processing.
- Concocted machine learning classifiers from Scikit-Learn to detect and correctly identify different phishing techniques such as Typosquatting, Spoofing, Whaling and Spear Phishing among others.
- Created ranking system algorithms to prioritize human revision of current threats.
- Developed text classification models to assess risk of brand infringement with the use of Python packages like NLTK and WordNinja.
- Wrote MapReduce jobs to detect patterns in daily and historical domain name registrations.
- Used statistical analysis on usability data to better understand and enhance user engagement and user story.
- Designed auto generated, data-oriented marketing material for social media with the use of Python, \LaTeX and the Twitter API.
- Designed and develop auto generated, data-driven monthly report template with detailed analysis of performance and usage of products.
- Contributed to the analysis and writing in forensic investigation reports.
- Ameliorated solutions by redesigning ETL and data analytics to function as a Linux service.

CONSULTING EXPERIENCE **K2 Data Science**, New York City, N.Y.
Data Science Curriculum Advisor Dec 2016–Jul 2017

- Designed and developed assignments with detailed solutions for the following subjects: Data Cleaning and Preprocessing, Exploratory Data Analysis, Regression, Classification.
- Helped plan and develop comprehensive learning material to aid students with assignments and prepare them for their future roles as Data Scientists.

EDUCATION **The Data Incubator**, Washington, D.C.
Certificate in Data Science 2016

University of Iowa, Iowa City, Iowa
Ph.D. in Mathematics 2016
M.Sc. in Mathematics 2014

University of Northern Iowa, Cedar Falls, Iowa
M.A. in Mathematics 2010

University of Puerto Rico, Rio Piedras Campus, San Juan, Puerto Rico
B.Sc. in Mathematics 2009

PUBLICATIONS **The Localized Skein Algebra is Frobenius** Oct 2017
N. Abdiel and C. Frohman, *Algebraic and Geometric Topology*, Volume 17, Issue 6.

Frobenius Algebras Derived From The Kauffman Bracket Skein Algebra Jan 2016
N. Abdiel and C. Frohman, *Journal of Knot Theory And Its Ramifications*, Volume 25, Issue 4.

ASSOCIATIONS Data Visualization Specialist, **Metric Geometry & Gerrymandering Group** Jan 2018–Present