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EDUCATION	<p>The Data Incubator, Washington, D.C. Certificate in Data Science 2016 • <i>Selected among the less than 4% of +1900 applicants.</i></p> <p>University of Iowa, Iowa City, Iowa Ph.D. in Mathematics 2016 M.Sc. in Mathematics 2014</p> <p>University of Northern Iowa, Cedar Falls, Iowa M.A. in Mathematics 2010</p> <p>University of Puerto Rico, Rio Piedras Campus, San Juan, Puerto Rico B.Sc. in Mathematics 2009</p>
EXPERIENCE	<p>Soteria - Security Consulting & Data Analytics, Charleston, S.C. Data Scientist Jun 2016–Present</p> <ul style="list-style-type: none">• Built algorithms to assess risk of Phishing on emails and websites based Natural Language Processing with the used of Python Packages such as Scikit-Learn, NLTK and Pandas.• Concocted metrics and analytics to detect and classify different phishing techniques such as Typosquatting, Spoofing, Whaling and Spear Phishing among others.• Developed predictive model to automate the detection of malicious websites with a 97% accuracy.• Ameliorated solutions by redesigning ETL and data analysis to function as a Linux service.• Engineered and maintained analytics API with the used of Python, Pandas, SciKit-Learn and Flask.• Built dashboards for internal use using Python, Flask, Django, HTML5/CSS3, Bootstrap, Bokeh and D3.js for analysts to interact with data from OSSEC and other services in a more visual matter.• Created software for feature extraction from unstructured data from +30000 websites a day.• Devised Python pipeline to automate the classification of +30000 websites received per day.• Was involved in the decision making and engineering of technologies and infrastructure for ETL.• Contributed to the writing of the technical section of an NSF SBIR/STTR grant proposal.• Prepared \LaTeX templates for client's automated monthly reports.• Developed probabilistic model to predict the outcome of ping pong matches in the office. <p>K2 Data Science, Remote Data Science Curriculum Advisor - Contract Dec 2016–Apr 2017</p> <ul style="list-style-type: none">• Designed and developed assignments with detailed solutions for the 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.
PUBLICATIONS	<p>The Localized Skein Algebra is Frobenius May 2017 N. Abdiel and C. Frohman, <i>Algebraic and Geometric Topology</i>, Accepted (in production queue).</p> <p>Frobenius Algebras Derived From The Kauffman Bracket Skein Algebra Jan 2016 N. Abdiel and C. Frohman, <i>Journal of Knot Theory And Its Ramifications</i>, , Volume 25, Issue 04, April 2016.</p>
SKILLS	<ul style="list-style-type: none">• <i>Stack</i>: Python, PostgreSQL, Spark, Hadoop, Bash, D3.js, Jupyter, Zeppelin, Ambari, Git, \LaTeX, Go.• <i>Knowledge of</i>: Machine Learning, Data Visualization, Object-Oriented Programming, Neural Nets.• <i>Tools</i>: Pandas, NumPy/SciPy, Scikit-Learn/XGBoost, Keras, Theano, Bokeh, Flask, HTML5/CSS3.• <i>Familiar with</i>: MapReduce, Cassandra, HAWQ, SQLite3, CockroachDB, MongoDB, R, C++, OSSEC.• <i>Dominance of</i>: English and Spanish.