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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 • Thesis Title: <i>Localized Skein Algebras As Frobenius Extensions.</i></p> <p>M.Sc. in Mathematics 2014</p> <p>University of Northern Iowa, Cedar Falls, Iowa M.A. in Mathematics 2010 • Research Paper: <i>Discrete Subgroups of $SL_2(R)$.</i></p> <p>University of Puerto Rico, Rio Piedras Campus, San Juan, Puerto Rico B.Sc. in Mathematics 2009</p>
SKILLS	<ul style="list-style-type: none">• Stack: Python, PostgreSQL, Spark, Hadoop, D3.js, Theano, Jupyter, Zeppelin, Ambari, Git, \LaTeX.• Knowledge of: Machine Learning, Data Visualization, Object-Oriented Programming, Neural Nets.• Tools: Pandas, NumPy/SciPy, Scikit-Learn/XGBoost, Keras, PyMC, Bokeh, Flask, HTML5/CSS3.• Familiar with: MapReduce, Cassandra, HAWQ, SQLite3, CockroachDB, MongoDB, R, C++.• Dominance of: English and Spanish.
EXPERIENCE	<p>Soteria - Security Consulting & Data Analytics, Charleston, S.C. Data Scientist - Contract Jun 2016–Present</p> <ul style="list-style-type: none">• Developed predictive model using PCA and a Random Forest Classifier to automate the detection of cyber threats with a 96% accuracy.• Assembled predictive model for detection of malicious websites based on content by performing Natural Language Processing with the use of TF-IDF Vectorizer and Logistic Regression with a 95% accuracy.• Built multiple web applications for internal use using Python, Flask, Django, HTML5/CSS3, Bootstrap and D3.js that allow 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. Both structured and unstructured data is then automatically saved into a Cassandra database.• 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.• Developed probabilistic model to predict the outcome of ping pong matches in the office. <p>The Data Incubator, Washington, D.C. Data Scientist - Fellow Jan 2016–Mar 2016</p> <p>Selected Projects:</p> <ul style="list-style-type: none">• Capstone: http://iokilos.herokuapp.com. Scraped over a thousand pages from various websites to collect data. Conducted a thorough analysis of the distribution of world records in Weightlifting. Developed an app for strength athletes' training cycles using KNearest Neighbor Regressor.• Conducted open-ended analysis of user behaviors on +9GB of StackOverflow data using Scala and Spark. <p>Mathematics Department, University of Iowa. Instructor and Teaching Assistant Aug 2011 – Dec 2015</p> <ul style="list-style-type: none">• Taught a variety of college courses (25 to +100 students), from Precalculus to graduate courses in Topology. <p>SELECTED PUBLICATIONS & AWARDS</p> <p>The Localized Skein Algebra Is Frobenius Jan 2016 N. Abdiel and C. Frohman, in <i>Journal of Knot Theory And Its Ramifications</i></p> <p>Ballard-Seashore Fellowship, University of Iowa Jan 2016 – May 2016 Awarded for outstanding contributions to the field of Topological Quantum Field Theory.</p>