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EDUCATION

George Washington University, Washington, D.C.
M.B.A. in Consulting — In Progress

The Data Incubator, Washington, D.C.
Certificate in Data Science — 2016
- *Selected among the less than 4% of +1900 applicants.*

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

EXPERIENCE

K2 Data Science, Remote
Data Science Curriculum Advisor - Contract — Dec 2016–Present

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

Soteria - Security Consulting & Data Analytics, Charleston, S.C.
Data Scientist - Contract — Jun 2016–Present

- 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.
- Developed model for detecting anomalous behavior based on user's historical data with the use of FFT.
- Built multiple dashboards for internal use using Python, Flask, Django, HTML5/CSS3, Bootstrap 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. Both structured and unstructured data is then automatically saved into a Cassandra database.
- Was involved in the decision making and engineering of technologies and infrastructure for ETL.
- Contributed to the improvement of already existing solution by boosting predictive model performance and adding new features to web application.

The Data Incubator, Washington, D.C.
Data Scientist - Fellow — Jan 2016–Mar 2016
Selected Projects:

- **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.
- Conducted open-ended analysis of user behaviors on +9GB of StackOverFlow data using Scala and Spark.

SKILLS

- *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.