



## Profile

A well-rounded Data Scientist with professional experience in Machine Learning, Data and Text Mining, Big Data Analytic Development, Data Visualization and report writing, Cyber Analytics, database design and implementation, customer-facing consulting and knowledge transfer, social media research and Arabic and Spanish proficiency. Interested in continuing to pursue and expand expertise in Data Science and Machine Learning topics.

## Experience

### BLUEVOYANT

#### DATA SCIENTIST – DECEMBER 2016 - NOVEMBER 2017

- Translated expert knowledge from network security analysts into production level data science algorithms capable of running on peta-scale datasets.
- Identified families of malicious networks on the internet using clustering and classification techniques with Spark and Python; utilized probabilistic data structures to achieve scalability.
- Developed a new algorithm to detect malicious copy-cat websites using locality sensitive hashing; the new  $O(N)$  algorithm scaled well beyond the legacy  $O(N^2)$  algorithm and ran in seconds vs hours.
- Evaluated quality and value of third-party data sources with comparative statistical analysis.

### IST RESEARCH

#### DATA SCIENTIST – SEPTEMBER 2015 - NOVEMBER 2016

- Developed unsupervised machine learning approach to draw insights from millions of social media text records.
- Created data visualizations, dashboards and analytical reports to summarize data from social media and from SMS and web survey data.
- Built image recognition API using GPU technology to facilitate analysts' qualitative research.
- Conducted training seminars to build visualizations and dashboards in Kibana for intelligence analysts.

### UNIVERSITY OF WASHINGTON

#### DATA SCIENCE FOR SOCIAL GOOD FELLOW – JUNE 2016 - SEPTEMBER 2016

- Collaborated with a team to develop a classification model using Amazon reviews to identify food products that should be recalled.
- Ingested multiple disconnected data sources into a PostGres database to facilitate future research and to label the data for classification.

### ORACLE CORPORATION

#### LANGUAGE ENGINEER – APRIL 2015 - JUNE 2016

- Acted as knowledge transfer lead to major customers for Oracle Knowledge Management and OBIEE software.
- Developed Java applications to facilitate data cleaning and customize enterprise search engine.
- Designed and implemented ontology and taxonomy rules.
- Authored internal and external documentation.

## Education

- Boston University – MS in Computer Information Systems
  - Concentration in Data Analytics
- Emory University – BA *magna cum laude* In Middle Eastern Studies
  - Significant Coursework in Math and Computer Science

## Languages

- Spanish (advanced)
- Arabic (conversational)

## Skills

- Data Science
  - Machine Learning, Text Mining, Statistics, Data Wrangling (proficient)
- Programing
  - Python, Spark/PySpark, R, SQL (proficient)
  - Java (intermediate)