

# Arianna Lang Wang

## Master's in Statistics | Data Analytics

✉ ariannalangwang@gmail.com ☎ (646) 275-4326 📍 Seattle, WA 🏠 arianna-lang-wang-2871bb44 🌐 ariannalangwang

## SUMMARY

A disciplined data analyst with solid technical skills and a master's degree in statistics. An effective team player with sound communication skills, a strong business sense and a background in managing client relationships and expectations.

I have 9 repositories on GitHub: <https://github.com/ariannalangwang>. They contain projects I've done using Python, R, SQL, etc.

### RESIDENCY STATUS:

U.S. Permanent Resident (U.S. Green Card Holder)  
Canadian Citizen

## SKILLS

Python	NumPy, Pandas, Matplotlib, Seaborn, Scikit-Learn
SQL	
R	base R, dplyr, tidyr, ggplot2, plotly
Machine Learning	Linear Regression, Logistic Regression, Support Vector Machines, Decision Tree & Random Forest, K Nearest Neighbors, Principal Component Analysis, K Mean Clustering, Naïve Bayes, Neural Nets
Spark	
Data Visualization	
Natural Language Processing (NLP)	

## PROJECTS

### Kickstarter Projects

March 2018 to May 2018

- Analyze Kickstarter projects in Python and predict whether a project will succeed or fail
- Work with a large data set with 378,661 records
- Implement NLP (natural language processing) to transform text-based data into numerical data
- Use random forest to perform feature selection
- Train random forest, logistic regression, naïve Bayes models and use classification table (precision rate and recall rate) to evaluate model performance
- Provide a written report and a blog post
- My Python code along with the written report can be found on GitHub: <https://github.com/ariannalangwang/Capstone-Project-Kickstarter-Projects>

### Global Terrorism Database

Jan. 2018 to March 2018

- Analyze global and domestic terrorist attacks from year 1970 to 2016
- Work with a data set with 170,351 rows and 135 columns
- Clean and wrangle data with various means such as missing data imputation, outliers' removal and feature engineering
- Manipulate data frames into different shapes by using assorted functions in the Pandas library
- Visualize data with graphs, maps and engaging stories
- Deliver an interactive U.S. choropleth map with the plotly library
- Utilize hypothesis tests such as test on correlation, ANOVA and post-hoc Tukey's test
- Execute pipeline to chain different transformers and estimators together and grid search for optimal hyperparameters
- Train random forest, logistic regression, PCA (principal component analysis) and SVM (support vector machines) models and employ different evaluation metrics
- Finish a written report and a blog post for the project
- My Python code along with the written report can be found on GitHub: <https://github.com/ariannalangwang/Capstone-Project-Global-Terrorism>

### Ultimate Inc. Data Science Challenge

March 2018 to April 2018

- Analyze user behavior and predict whether a user will be active in his 6th month of using the service
- Import and manipulate multiple JSON files into data frames in Python
- Apply time-series analysis to characterize and visualize the underlying patterns in the data
- Utilize three machine learning models to make classifications and predictions
- Plot ROC curves and implement other evaluation metrics to evaluate the models
- My Python code for this project is on GitHub: <https://github.com/ariannalangwang/Ultimate-Inc.-Data-Science-Challenge>

### Other Smaller Projects

There are many more projects I've done and my GitHub account contains all of them.

- Machine learning, NLP & other projects using Python: <https://github.com/ariannalangwang/Smaller-Python-Projects>
- Machine learning projects using R: <https://github.com/ariannalangwang/R-Projects>
- Relax Inc. Data Science Challenge: <https://github.com/ariannalangwang/Relax-Inc.-Data-Science-Challenge>

## EDUCATION

### North Carolina State University

Master of Statistics 2017

GPA 3.93

Statistical Programming, Statistical Theory I & II, Inferential Statistics, Experimental Statistics, Data Mining, Applied Multinomial & Longitudinal Data Analysis, Applied Categorical Data Analysis, Statistical Consulting

### Springboard

Data Science Career Track Program 2018

500+ hours of data science curriculum with industry mentoring.

Python, SQL, data cleaning and data wrangling, inferential statistics, data visualization, machine learning, big data (using Spark), two capstone programming projects, two data science challenge programming projects, at least 5 other smaller programming projects

### Syracuse University

Post-Baccalaureate in Mathematics 2015

GPA 4.0

Programming in C, Probability, Mathematical Statistics, Calculus II, III & IV, Linear Algebra I & II, Real Analysis I, Stochastic Processing, Complex Analysis, Ordinary Differential Equations, Abstract Mathematics

### University of British Columbia

Bachelor of Commerce in Finance 2007

GPA 3.52

## EMPLOYMENT

### Office of Assessment, North Carolina State University

Raleigh, NC

Data Analytics Consultant · Jan. 2017 to May 2017

- Evaluate the impact of exploratory studies program and on-campus housing on academic performances such as GPA and time-to-degree
- Work with the client to ensure that the project satisfies the client's goals
- Give presentations and compose written reports

### Department of Statistics, North Carolina State University

Raleigh, NC

Teaching Assistant · Aug. 2015 to May 2016

- Teaching assistant for two statistics courses
- Hold office hours and answer student questions
- Grade homework and exams

### Client Relationship Consultant

Toronto, Canada

Bank of Montreal · Sept. 2009 to Nov. 2011

- Provide professional financial service to clients in a sales-oriented environment
- Manage client expectations and answer client inquiries regarding brokerage products and services
- Seek, recognize and act upon opportunities to expand business relationships with clients

### Customer Service Representative

Vancouver, Canada

Bank of Montreal · Aug. 2008 to Aug. 2009

- Perform various financial transactions and answer customer questions regarding bank products and services
- Proactively identify and discuss customer needs and refer opportunities to Client Relationship Consultants
- Process financial transactions and ensure compliance with bank policies and procedures

### Assistant to Financial Director

London, UK

Albany Capital Consulting · Sept. 2007 to April 2008

- Liaise with stockbrokers, financial analysts and current clients from all over Europe and Asia
- Settle trades in domestic and international financial markets
- Research company profiles and financial statements
- Attend IPOs and other general stockholder meetings and report back to the financial director