




Michael Bostwick

908.500.6436 

michael.bostwick@gmail.com 

github.com/mgbostwick 

mgbostwick.github.io 

EDUCATION

MS, Statistics &

Operations Research

University of North Carolina
at Chapel Hill

May 2018

Machine Learning Concentration

BS, Statistics

University of Connecticut

May 2010

Business Minor

SKILLS

Machine Learning

Text Mining

Optimization

Algorithms

Time Series Analysis

Linear Models

Simulation Modeling

TOOLS

Python

Theano

R

Bash

SAS

SQL

AMPL

EXPERIENCE

RESEARCH ASSISTANT/TEACHING ASSISTANT

UNC Kenan-Flagler Business School, May 2017 – May 2018

- Created Python pipeline to prepare and analyze complex call center data, enabling research of customer behavior in service operations
- Designed and graded machine learning assignments as TA for MBA course in Data Analytics

DATA SCIENCE INTERN

Spredly, June 2017 – July 2017

- Built lead scoring model for financial technology startup, prioritizing prospective customers and providing insights into subscription behavior
- Worked the problem from end to end, including: defining business considerations, cleaning messy data with Pandas, creating machine learning models in Scikit-learn, performing error analysis, and communicating results in company-wide presentation

STATISTICIAN

RTI International, September 2014 – August 2016

- Developed statistical programming in SAS to process, weight and analyze survey data for clients including the Centers for Disease Control, the Department of Education and the Department of Justice
- Selected to present findings at the American Association of Public Opinion Research Annual Conference, furthering research on mobile surveys

IT RESEARCH & STRATEGY ANALYST

Navy Federal Credit Union, May 2013 – August 2014

- Performed data analysis to identify trends and outliers in the performance of IT project portfolio, resulting in more effective resource utilization
- Provided research and analysis of trends at the intersection of banking and technology directly to the Chief Technology Officer and senior IT leadership

DATA ANALYST/CAMPUS STAFF

CRU, May 2010 – August 2012

- Led initiatives to support evidence based decision making for non-profit organization, informing national leadership decisions through accessible presentation of data-based findings

PROJECTS

Survival of the Fittest: Variable Selection on Agricultural Data

- Modeled agricultural relationships in the Galapagos Islands using ElasticNet and Forward Selection to find key variables among 200+ features

Learning to Rank for Call Center Queue Optimization

- Compared the performance of predicting shortest customer service time using a pointwise regression model and a listwise Neural Network ranking model optimized with Theano

Supervised Topic Modeling for Health Score Predictions

- Extracted topics from restaurant reviews predictive of inspection violations using Supervised Latent Dirichlet Allocation