

## SUMMARY

Quantitative PhD with a 10-year record of high-impact research that directly informed federal legislation. Designed and executed statistical analyses for teams of senior scientists on dozens of studies. As both a scientist and Vice President of Research, engineered data science projects that affected millions of people. A talented storyteller, excels in roles that link data science with communications to inspire change.

## EDUCATION

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| 2017 | <b>Metis Bootcamp</b><br>Data Science Certificate<br>Expanded skills in Python-based data science (e.g., deep learning; recommender systems; NLP; D3; Hadoop, Hive, Spark) |
| 2010 | <b>U. North Carolina-Chapel Hill</b><br>PhD Epidemiology   |
| 2005 | <b>U. Washington</b><br>MPH Health Services  |

## DATA SCIENCE PROJECTS

### ESTIMATING THE IMPACT OF #GIVINGTUESDAY ON 501(C)(3) FUNDRAISING

Tools: Python (pandas, NumPy, tweepy); Twitter API; economic modeling

### PREDICTING RUNNER TIMES IN THE 2017 CHICAGO MARATHON

Tools: Python (pandas, NumPy, selenium, BeautifulSoup, matplotlib, scikit-learn); ridge, lasso regression

### THE SCIENCE OF STORYTELLING: PREDICTING WHICH TED TALKS GO VIRAL

Tools: Python (NLTK, scikit-learn, k-Shape); time series clustering; ensemble modeling; MongoDB; AWS

### FORECASTING THE 2018 ACADEMY AWARDS

Tools: Python (random forests, boosting, KNN, SVM, logistic regression, Naive Bayes); SQL; Tableau

## SKILLS

**PROGRAMMING:** Python, SQL, R, AWS, PostgreSQL, MongoDB, Tableau

**DATA SCIENCE:** Regression, random forests, boosting, KNN, SVM, PCA, K-means clustering, natural language processing, neural networks, interrupted time series

**MARKETING & COMMUNICATIONS:** Business founder, public speaking, media interviews, podcasts

## EMPLOYMENT

### VICE PRESIDENT OF RESEARCH & EVALUATION

Healthy Food America

Seattle, WA  
Jul 2016 to Mar 2017

- Engineered a project with Harvard researchers to use microsimulation models to forecast the health and economic impacts of policy changes in the 20 largest cities in the U.S.
- Launched organization's research portfolio, influencing policy changes that affected 5 million citizens

### ASSISTANT PROFESSOR

U. Texas Health Science Center at Houston

Austin, TX  
Jul 2013 to Jun 2016

- Predicted disease rates with ensemble of algorithms and methods (e.g., random forests, simulations)
- Authored 10 scientific papers and delivered 16 talks in the U.S., Mexico, Canada, Scotland, South Africa

### RESEARCH SCIENTIST

U. Illinois at Chicago

Chicago, IL  
Jul 2010 to Jun 2013

- Headed statistical analyses and programming for team of senior scientists on 14 studies
- Pioneered the first study to quantify the impact of state laws on weight change among children