

# Felix E Dulys

Boulder, Colorado  
<http://www.felixdulys.com>

## ABOUT

I harness data to make a difference while striving for excellence.

## EDUCATION

**M.Sc. Applied Economics**, 2016, Peace Corps Masters International Fellow

*Michigan State University* (East Lansing, Michigan)

**B.Sc. Environmental Policy & Planning**, 2010, summa cum laude

*Virginia Tech* (Blacksburg, VA)

## WORK

### Data Scientist

*Uplight (previously Simple Energy)*, 2016 - present (Boulder, CO)

Drive energy-wise actions for utility customers through scientific, algorithmic, and product design.

- ▶ create, deploy, and maintain production-quality machine-learning algorithm applications including neural networks and unsupervised clustering applications
- ▶ perform ad-hoc analyses in the arenas of energy, marketing, and e-commerce
- ▶ design and analyze randomized control trials for regulatory behavioral energy programs
- ▶ answer difficult business questions by harnessing information, computation, and mathematics
- ▶ forecast weather and energy savings
- ▶ continuously stay up to date on behavioral science and mathematical literature to inform product and software design

### Energy Services Intern

*The Cadmus Group*, 2015 - 2016 (Lansing, MI)

Performed data analysis and reporting for utility energy efficiency programs.

- ▶ verified reported deemed savings for the utility Consumers Energy
- ▶ assisted with research implementation for energy efficient measures
- ▶ calculated Likert-based customer satisfaction ratings ("Net Promoter Score") from utility customer surveys
- ▶ crafted energy efficiency program implementation reports

### Impact Research Analyst

*Michigan State University*, 2012 - 2013 (East Lansing, Michigan)

Utilized propensity-score matching to analyze a contaminated randomized control trial.

## SERVICE

### Youth Mentor

*I Have A Dream Foundation, 2017 - present (Boulder, CO)*

### Sustainable Agriculture Systems Volunteer

*United States Peace Corps, 2013 - 2015 (Panama)*

## FLUENCY

Python

R

SQL

English

Spanish

## DATA TOOLBOX

AWS S3, EC2, Lambda

RESTful API

PostgreSQL, Cassandra, MySQL

Azure

## DATA SCIENCE TOOLBOX

Neural network algorithm applications, including regression

Pooled, time series, and panel-level econometrics

Logistic / probit binary dependent variable regression

L1 and L2 regularized regression

Stochastic regularization techniques (cyclical learning rates)

Cosine similarity and k-means clustering

Stochastic optimization

pandas, numpy, scikit-learn, keras / Tensorflow, jupyter, seaborn, matplotlib, Gephi, tidyverse

## HACKATHON

*MigraHack 2019 Immigration Hackathon (ongoing project) Seguros Unidos ICE Raid History and Tracking App*

## PUBLICATONS

*What we can learn from 400 years of US executions: Towards Data Science*

*Timber Residue Supply for Bioenergy in the Northern Tier of the Great Lakes: Determinants and availability: Biomass and Bioenergy, 2019, Volume 122*

*Raising the Incomes of Smallholder Farmers in the Central Highlands of Angola: A Model Project for Improving Agricultural Value Chains in Post-Conflict Nations: white paper for the Bill and Melinda Gates Foundation*

*Benefits, Barriers, and Challenges to University-Level Food Waste Tracking: Journal of Hunger and Environmental Nutrition, 2016, Volume 11*