

# Elena Dulys

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

## ABOUT

I harness data to make a difference.

## EDUCATION

**M.Sc. Applied Economics**, 2016

*Michigan State University* (East Lansing, Michigan)

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

*Virginia Tech* (Blacksburg, VA)

## WORK

### Data Scientist

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

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

- ▶ design and analyze randomized control trials for regulatory behavioral energy programs
- ▶ perform statistical analyses in the arenas of energy, marketing, and e-commerce
- ▶ create, tune, fix, and maintain machine-learning algorithm applications
- ▶ answer difficult business questions by harnessing information, computation, and mathematics
- ▶ measure and forecast company performance
- ▶ explore data to discover insights, driving company success
- ▶ continuously review behavioral science and mathematical literature to inform product 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*, 2013 - 2014 (East Lansing, Michigan)

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

### Sustainability Coordinator

*Virginia Tech*, 2011 - 2012 (Blacksburg, VA)

Coordinated and implemented campus-wide composting, recycling, food donation, local food procurement, and a campus farm for a 30,000 meal per day university dining program.

## 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

English

Spanish

## DATA TOOLBOX

AWS S3

RESTful API

PostgreSQL

MySQL

Cassandra

Azure

## MODEL TOOLBOX

Pooled, time series, and panel-level econometrics

Logistic or probit binary dependent variable regression

Truncated regression

Neural network algorithm applications

Stochastic regularization techniques (cyclical learning rates)

Cosine similarity and k-means matching

Stochastic optimization

## PUBLICATIONS

*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