Felix E Dulys

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