eric@k2co3.net / k2co3.net / github.com/potash

Experience University of Illinois Urbana-Champaign 2020-Now Research Scientist, Institute of Sustainability, Energy, and Environment University of Chicago 2017-2020 Postdoctoral Scholar (Advisor: Dan Black), Harris School of Public Policy EDUCATION Northwestern University 2009-2014 Ph.D. Mathematics (Advisor: Steve Zelditch) Dissertation: Euclidean Embeddings and Riemannian Bergman Metrics Columbia University 2005-2009 B.A. Mathematics with Honors, Columbia College Thesis: An Application of Poincaré's Fundamental Polyhedron Theorem Algorithmic Fairness: Choices, Assumptions, and Definitions Publications To appear in Annual Reviews of Statistics, 2021. S. Mitchell, E. Potash, S. Barocas, A. D'Amour, K. Lum Validation of a Machine Learning Model to Predict Childhood Lead Poisoning JAMA Network Open 3 (9), e2012734-e2012734 E. Potash, R. Ghani, J. Walsh, E. Jorgensen, C. Lohff, N. Prachand, R. Mansour Randomization Bias in Field Trials to Evaluate Targeting Methods Economics Letters, Volume 167, June 2018, Pages 131–135. E. Potash Predictive Modeling for Public Health: Childhood Lead Poisoning 21st ACM SIGKDD Proceedings E. Potash, J. Brew, A. Loewi, S. Majumdar, A. Reece, J. Walsh, E. Rozier, E. Jorgensen, R. Mansour, R. Ghani Euclidean Embeddings and Riemannian Bergman Metrics The Journal of Geometric Analysis, January 2016, Volume 26, Issue 1, pp 499-528 E. Potash Working Papers A Bayesian Approach to Recreational Water Quality Modeling and Cross Validation in the Presence of Measurement Error Submitted.E. Potash and S. Steinschneider OTHER WRITING Why It's So Hard to Find Out Where the Candidates Stand Washington Monthly, November 2016 Environmental Policy Institute at Chicago (EPIC) Workshop Invited Talks

Can Health Departments Prevent Childhood Lead Poisoning?, 5/15/2018

EPA Research and Development "Science at Work" Seminar

City Bureau Public Forum

Lead Poisoning Panel Speaker, 3/13/2017

Proactive Lead Investigations, 4/12/2017

American Public Health Association Annual Meeting

Predictive Analytics in Advancing Public Health Session, 11/3/2015

Bloomberg Data for Good Exchange

Predictive Modeling for Public Health: Childhood Lead Poisoning, 9/30/2015

ACM Knowledge Discovery and Data Mining (KDD) Annual Conference

Predictive Modeling for Public Health: Childhood Lead Poisoning, 8/12/2015

Grants

Collecting and Sharing Information across Sectors in Chicago and Illinois to Identify Children at Risk for Lead Poisoning. Robert Wood Johnson Foundation. With Rayid Ghani, Raed Mansour, Matthew Roberts, John DiCello, Tom Schenk, Illinois Department of Human Services, and Alliance of Chicago. Grant ID 73354. \$200,000.

Industry Experience

University of Chicago

2014-2017

Research Professional II, Center for Data Science and Public Policy

Eric and Wendy Schmidt Data Science for Social Good

Summer 2016

Technical Mentor

Open Energy Efficiency Meter (openeemeter.org)

2015

Data Scientist

Oroeco (oroeco.com)

2014

Scientific Software Engineer

Teaching

University of Chicago

2016-2020

Mutlilevel Regression Modeling for Public Policy (Winter 2020) Introduction to Program Evaluation (Spring 2019, Winter 2020) Introduction to Programming for Public Policy (Spring 2018, 2016)

Northwestern University

2008 - 2013

Assistant: Probability & Stochastic Processes, Mechanics, Real Analysis

SKILLS

Python (numpy, scipy, pandas, sklearn, matplotlib)

R (tidyverse, rstanarm)

SQL (PostgreSQL), Java, JavaScript (D3.js), Ruby (on Rails)

Geospatial (PostGIS, GDAL, OpenStreetMap, Mapnik, QGIS, Leaflet)

git, bash, GNU/Linux, LATEX

Fluent in Russian

References

- Dan Black, danblack@uchicago.edu Professor, Harris School of Public Policy, University of Chicago
- Shira Mitchell, sam942@mail.harvard.edu Statistician, Civis Analytics
- Emile Jorgensen, Emile.Jorgensen@cityofchicago.org Epidemiologist, Chicago Department of Public Health