

EXPERIENCE	<b>University of Illinois Urbana-Champaign</b> Research Scientist, Institute of Sustainability, Energy, and Environment	2020–Now
	<b>University of Chicago</b> Postdoctoral Scholar (Advisor: Dan Black), Harris School of Public Policy	2017–2020
EDUCATION	<b>Northwestern University</b> Ph.D. Mathematics (Advisor: Steve Zelditch) Dissertation: Euclidean Embeddings and Riemannian Bergman Metrics	2009–2014
	<b>Columbia University</b> B.A. Mathematics with Honors, Columbia College Thesis: An Application of Poincaré’s Fundamental Polyhedron Theorem	2005–2009
PUBLICATIONS	<b>How to estimate soil organic carbon stocks of agricultural fields? Perspectives using ex-ante evaluation</b> To appear, <i>Geoderma</i> , 2022. <b>E. Potash</b> , K. Guan, A Margenot, DK Lee, E DeLucia, S Wang, C Jang	
	<b>A Bayesian Approach to Recreational Water Quality Model Validation and Comparison in the Presence of Measurement Error</b> To appear, <i>Water Resources Research</i> , 2022. <b>E. Potash</b> and S. Steinschneider	
	<b>Algorithmic Fairness: Choices, Assumptions, and Definitions</b> <i>Annual Reviews of Statistics</i> 8, 2021. S. Mitchell, <b>E. Potash</b> , S. Barocas, A. D’Amour, K. Lum	
	<b>Validation of a Machine Learning Model to Predict Childhood Lead Poisoning</b> <i>JAMA Network Open</i> 3 (9), e2012734-e2012734 <b>E. Potash</b> , R. Ghani, J. Walsh, E. Jorgensen, C. Lohff, N. Prachand, R. Mansour	
	<b>Randomization Bias in Field Trials to Evaluate Targeting Methods</b> <i>Economics Letters</i> , Volume 167, June 2018, Pages 131–135. <b>E. Potash</b>	
	<b>Predictive Modeling for Public Health: Childhood Lead Poisoning</b> <i>21st ACM SIGKDD Proceedings</i> <b>E. Potash</b> , J. Brew, A. Loewi, S. Majumdar, A. Reece, J. Walsh, E. Rozier, E. Jorgensen, R. Mansour, R. Ghani	
	<b>Euclidean Embeddings and Riemannian Bergman Metrics</b> <i>The Journal of Geometric Analysis</i> , January 2016, Volume 26, Issue 1, pp 499–528 <b>E. Potash</b>	
OTHER WRITING	<b>Why It’s So Hard to Find Out Where the Candidates Stand</b> <i>Washington Monthly</i> , November 2016	
INVITED TALKS	<b>Environmental Policy Institute at Chicago (EPIC) Workshop</b> Can Health Departments Prevent Childhood Lead Poisoning?, 5/15/2018	
	<b>EPA Research and Development “Science at Work” Seminar</b> Proactive Lead Investigations, 4/12/2017	

**City Bureau Public Forum**

Lead Poisoning Panel Speaker, 3/13/2017

**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

Multilevel 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 &amp; 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, L<sup>A</sup>T<sub>E</sub>X

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