Eric Potash

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Experience

University of Chicago 2017–Now
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 Class of 2009
Thesis: An Application of Poincaré's Fundamental Polyhedron Theorem

Publications

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

Prediction-Based Decisions and Fairness: A Catalogue of Choices, Assumptions, and Definitions
S. Mitchell, **E. Potash**, S. Barocas

Work in Progress

Validation of a Machine Learning Prediction Model of Elevated Blood Lead Levels
E. Potash, R. Ghani, E. Jorgensen, C. Lohff, N. Prachand, R. Mansour

The Effect of Early Interventions on Childhood Lead Exposure
with Emile Jorgensen

Other Writing

Why It's So Hard to Find Out Where the Candidates Stand
Washington Monthly, November 2016

Invited Talks

Environmental Policy Institute at Chicago (EPIC) Workshop
Can Health Departments Prevent Childhood Lead Poisoning?, 5/15/2018

EPA Research and Development "Science at Work" Seminar
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
Introduction to Program Evaluation (Spring 2019)
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 (dplyr, Stan, ggplot2)
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
- Matt Gee, mattgee@gmail.com
  Research Fellow, Urban Center for Computation and Data
- Emile Jorgensen, Emile.Jorgensen@cityofchicago.org
  Epidemiologist, Chicago Department of Public Health
- Steve Zelditch, s-zelditch@northwestern.edu
  Wayne and Elizabeth Jones Professor of Mathematics, Northwestern University