epotash@uchicago.edu / k2co3.net / github.com/potash

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

 $Economics\ Letters,\ Volume\ 167,\ June\ 2018,\ Pages\ 131–135.$ 

Predictive Modeling for Public Health: Childhood Lead Poisoning

21st ACM SIGKDD Proceedings

Euclidean Embeddings and Riemannian Bergman Metrics

The Journal of Geometric Analysis, January 2016, Volume 26, Issue 1, pp 499-528

An Asymptotic for the Representation of Integers as Sums of

Triangular Numbers

Involve, 2008, no. 1, p. 111-121. (with A. Atanasov, R. Bellovin,

I. Loughman-Pawelko and L. Peskin)

WORKING PAPERS Predictive Modeling for Environmental Protection: Hazardous Waste Management

with Jimmy Jin, Maria Kamenetsky, Dean Magee, Paul van der Boor, and Rayid Ghani

Work in Progress An Evaluation of Predictive Modeling for Primary Prevention of Childhood Lead

Poisoning

with Rayid Ghani, Emile Jorgensen, Cortland Lohff, and Raed Mansour

Secondary Prevention of Childhood Lead Poisoning: Analysis Using Instrumental

Variables

with Emile Jorgensen

POPULAR WRITING Why It's So Hard to Find Out Where the Candidates Stand

Washington Monthly, November 2016

INVITED TALKS 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 programming for Public Policy, Computation for Public Policy

Northwestern University

2008-2013

Assistant: Probability & Stochastic Processes, Mechanics, Real Analysis

SKILLS

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

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

 ${\it Geospatial~(PostGIS,~GDAL,~OpenStreetMap,~Mapnik,~QGIS,~Leaflet)}$ 

git, bash, GNU/Linux, LATEX

Probability, Causal Inference, Differential Geometry, Partial Differential Equations

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