

# Evan J. Coopersmith, PhD, PE

Email: ecooper2@gmail.com

Cell #: (610) 639-2087

Websites: [www.prognosticdatasolutions.com](http://www.prognosticdatasolutions.com), [www.traffichackers.com](http://www.traffichackers.com)

## Executive Summary

- Data scientist with 5 years of professional experience applying analytical expertise in multiple fields
- Educational and professional experience in the physical sciences and finance
- Published 11 first-authored and 4 co-authored manuscripts in high-impact, international journals
- Gifted teacher with recognized excellence instructing undergraduate and graduate students

## Education

**University of Illinois**, Urbana-Champaign, IL

Ph.D., July 2013 in Civil & Environmental Engineering

Cumulative GPA: 3.96/4.0

M.S., May 2008 in Civil & Environmental Engineering

Cumulative GPA: 3.70/4.0

**Princeton University**, Princeton, NJ

B.S.E., June 2006 in Operations Research and Financial Engineering, *Cum Laude*

**Honor Societies:** Tau Beta Pi and Sigma Xi

## Data Science Experience

**Prognostic Data Solutions LLC - Founder**, Washington D.C. & Chicago, IL

*Freelance data scientist and consultant, developing proprietary algorithms for predictive modeling.*

**TrafficHackers** – *Developed predictive models for three major Boston highways using public traffic data. Collaborated with the Massachusetts Department of Transportation and helped to ensure optimal usage of existing datasets. Received mention in the Boston Globe.*

Jan. 2014 – Present

**\*\*Private Consulting\*\*** - *Developed proprietary statistical tools to assess probability of large-scale snow events in major American cities using NOAA historical climatic data.*

March 2015 – June 2015

**NASA/USDA, Hydrology & Remote Sensing Laboratory – Research Data Scientist**, Washington D.C.  
*Achieved out-of-sample accuracy of soil moisture estimation below NASA's target of  $0.04\text{m}^3/\text{m}^3$ .*

*Leveraged in-ground sensor estimates and satellite datasets. Developed predictive algorithms for soil moisture at over 100 locations nationwide. Applied geospatial approaches to produce multi-scale soil moisture estimates at USDA and Climate Reference Network test sites. Employed those estimates to assess the performance of satellite-based remotely-sensed estimates from NASA and European satellites.*

Aug. 2013 – Present

**John Deere Technological Innovation Center – Research Data Scientist**, Champaign, IL

*Produced predictions of field readiness with over 90% accuracy. Worked in concert with agronomic researchers through their local offices during doctoral work. Delivered presentations to managers in advanced marketing and agricultural systems analysis, which helped to sustain research funding for myself and subsequent doctoral students. Wrote a white-paper to corporate management detailing strategic intersections between academic and corporate objectives with respect to usage of 'big data.'*

May 2012 – July 2013

**BCW Group LLC – Principal and Co-Founder**, New York, NY

*One of three founding members of a quantitative hedge fund start-up at NYMEX. Achieved 7% returns during a period in which the equity markets fell 35%. Developed proprietary, non-discretionary trading algorithms, which were implemented from 9/2/08 to 4/28/09. Employed machine learning models and original mathematical work to build superior risk/reward ratios.*

Jan. 2008 – Apr. 2009

**Freelance Sabermetric Modeler**, Princeton, NJ and Champaign, IL

*Asymmetric Objectives & Inefficient Markets: A Non-Parametric Predictor for Major League Baseball Games And the Evaluation of Betting Lines – Mudd Library, Princeton University, Senior Thesis 2006.*

*Produced 130% annual returns. Developed a proprietary non-parametric predictor for assessing the probabilities of various outcomes using a database of over 50,000 historical baseball games. Placed over 4,000 wagers on baseball games over the course of two seasons.*

Spr. 2006 – Fall 2007