# PATRICK LAM

# http://www.patricklam.org patrick@thresher.io

#### EMPLOYMENT

# Lead Data Scientist Thresher

July 2015 - Present

http://thresher.io

- Develop and code the algorithm and technology behind the Thresher product
- Work with clients to provide insight behind unstructured text and keywords through the Thresher algorithm

#### EDUCATION

### Ph.D. in Political Science

November 2013

Harvard University

Dissertation: Estimating Individual Causal Effects

Committee: Gary King (chair), James Alt, Adam Glynn, Arthur Spirling

A.M. in Statistics

March 2013

Harvard University

## B.A. in Political Science — magna cum laude

June 2006

University of California, Los Angeles

#### Publications

Computer-Assisted Keyword and Document Set Discovery from Unstructured Text (with Gary King and Margaret Roberts). American Journal of Political Science, forthcoming

#### Consulting Experience

#### Statistical Consultant Beecher Analysis Group

October 2012 - July 2015

- Retained by preeminent international law firm as a core team member performing expert data analysis as a part of a high-stakes nationwide litigation
- Retained by the Australian Council of Trade Unions to perform data analytics and field experiments for the 2013 Australian Federal Election
- Retained by the International Finance Corporation to perform midterm evaluation for the IFC SME Finance Initiative

#### Short-term Consultant, International Finance Corporation

May 2012 - January 2014

• Statistical consultant for program evaluation on various IFC development projects

## TEACHING EXPERIENCE

# Government 50: Introduction to Political Science Research Methods,

Spring 2010-2011

- Teaching fellow for Professors Arthur Spirling and Adam Glynn
- Undergrad class at Harvard University and Harvard Division of Continuing Education
- Taught basic statistical analysis using SPSS

## 17.800: Quantitative Research Methods I: Regression,

Fall 2010-2011

- Teaching assistant for Professor Jens Hainmueller
- Graduate-level class at the MIT Political Science Department
- Focus on linear regression and causal inference using R and Stata

# Informal Bayesian Data Analysis Course,

Spring 2009-2010

- Instructor for an informal graduate-level Bayesian statistics course in the Harvard Government Department
- Developed my own syllabus and problem sets

## Government 40: International Conflict and Cooperation,

Spring 2009-2010

- Teaching fellow for Professor Stephen Rosen
- Undergrad class at Harvard University in international relations

## Math Prefresher for Incoming Graduate Students,

Fall 2008, 2009

- Instructor in Fall 2009-2010 and teaching fellow for Jen Bachner in Fall 2008-2009
- Math refresher class for incoming Harvard Government Department graduate students
- Reviewed calculus and probability and taught the basics for data analysis in R

### Government 1002/2001: Advanced Quantitative Political Methodology,

Spring 2008-2009

- Teaching fellow for Professor Gary King
- Popular graduate-level class at Harvard University and Harvard Division of Continuing Education
- Taught probability, maximum likelihood, causal inference, and missing data methods using R

### Government 2002: Topics in Quantitative Methods,

Fall 2008-2009

- Teaching fellow for Professor Michael Herron (Dartmouth University)
- Graduate-level class on Bayesian statistics using R

### Senior Thesis Advisor, Harvard Government Department

2008-2011

- Andrew Chan (2008-2009), magna cum laude plus
- Christopher Behrer (2010-2011), summa cum laude minus, winner of the Harvard Hoopes Prize
- Taylor Helgren (2010-2011), summa cum laude

# Political Science 88SB: Globalization and Inequality,

Spring 2006

• Developed my own seminar at UCLA on globalization under the supervision Professor Ronald Rogowski

## STATISTICAL SOFTWARE (DEVELOPED IN R)

Patrick Lam, "coxph: Cox Proportional Hazard Regression for Duration Dependent Variables," in Kosuke Imai, Gary King, and Olivia Lau, "Zelig: Everyone's Statistical Software," http://gking.harvard.edu/zelig. 2007.

Patrick Lam "Generalized Estimating Equation for Logistic, Probit, Normal, Poisson, and Gamma Regression," in Kosuke Imai, Gary King, and Olivia Lau, "Zelig: Everyone's Statistical Software," http://gking.harvard.edu/zelig. 2007.

### AWARDS AND HONORS

Dissertation Completion Fellowship, Harvard GSAS,	2011-2012
Research Grant, Harvard University Institute for Quantitative Social Science	2008 - 2009
Honorable Mention, National Science Foundation Graduate Fellowship	2007
Harvard GSAS Fellowship, full graduate fellowship for five years	2006-2011
Sylvia Sorkin Greenfield Award, best senior thesis in political science at UCLA	2006
Skills	

Various Statistical/Software Packages and Programming Language: R, Python, Apache Spark, Elasticsearch, Stata, SPSS

Statistical Expertise: basic statistical inference, linear regression, maximum likelihood models, Bayesian statistics, causal inference in observational and randomized studies, experimental design, missing data methods, bootstrapping and permutation methods, machine learning, text analysis