

# Stephen Pettigrew

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stephenpettigrew.com

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## Work Experience

### University of Pennsylvania

*Associate Director of Data Sciences of the Program on Opinion Research and Election Studies*

- Coordinated and conducted research projects related to public opinion and elections in the United States
- Developed and taught a course in the pcore curriculum for Penn's undergraduate data science degree

*Deputy Executive Director of the Robert A. Fox Leadership Program*

- Oversaw undergraduates through a research fellows program

Philadelphia, PA

Dec. 2017–pres.

Dec. 2017–pres.

### NBC News

*Senior Analyst on Decision Desk*

- Developed and implemented new statistical models for calling elections
- Contributed to development of new election night dashboard software

New York, NY

Dec. 2017–pres.

### MIT Election Data and Science Lab

*Project Manager*

- Managed team of undergraduates and graduate students in building an election data clearinghouse

*Data Scientist*

- Constructed dataset for calculating 3 iterations of the Pew Elections Performance Index

Cambridge, MA

Apr.–Nov. 2017.

Sept. 2011–Apr. 2017

### Data Scientist and Consultant

*Bipartisan Policy Center/MIT Precinct Monitoring Project (Project Manager)*

- Produced report of the study's findings including individualized reports delivered to participant states
- Coordinated workflow of 10 data entry assistants

*Cooperative Congressional Election Study (Data Analyst)*

- Produced cumulative data file for longitudinal analysis of 6 years of survey data

*Winners View (Sports Media Data Consultant)*

- Developed statistical model of 3-point shooting among NBA centers; managed 2 research assistants

*Beecher Consulting LLC (Lead Data Analyst)*

- Evaluated program that invested \$100m+ in small and medium-sized firms in developing world

*Wall Street Journal (Data Modeler)*

- Evaluated impact of offensive and defensive skills on college basketball team

*Philadelphia 76ers (Sports Analytics Consultant)*

- Produced forecasting model of NBA success based on collegiate data; constructed database of 4 decades of college basketball statistics

Cambridge, MA

Oct. 2014–Oct. 2017

Jan. 2012–May 2017

Apr.–Jul. 2016

Jan.–Jun. 2016

Mar. 2015

Jul.–Nov. 2014

## Education

### Harvard University

PhD: Political Science; William Yandell Elliott Fellow

Master of Arts: Statistics

Cambridge, MA

May 2017

Mar. 2014

### University of Georgia

Master of Arts: Political Science and International Affairs

Bachelor of Arts: Political Science and History; Summa Cum Laude; Phi Beta Kappa

Athens, GA

May 2011

May 2011

## Statistics and programming expertise

Predictive modeling	R · Python · Stata · $\LaTeX$ · HTML · CSS	Regression
Data visualization	Web scraping	Survey methodology
Natural language processing	Machine learning	Bayesian inference
	Database management	

## Leadership and teaching

### Conference Organizer

*Harvard Political Analytics Conference* 2016, 2017, 2018

- Organized hackathon where participants analyzed 2 elections databases constructed for the event
- Coordinated research paper competition, vetting more than 30 academic research submissions

*Who Will Win in Rio?* 2016

- Led a day-long conference on political, economic, and athletic success at the 2016 Olympics

**Univ. of Pennsylvania, Harvard University; MIT** 2013–pres

- Taught 5 semesters of PhD-level statistics and 2 semesters of undergraduate data science classes  
Topics: R programming · experiment design · generalized linear models · causal inference
- Taught 4 semesters of 2 undergraduate level political science classes
- Received Harvard Certificate of Distinction in Teaching for exemplary teaching evaluations (4 times)

**Boy Scouts of America** 2000–2008

- Eagle Scout; Assistant Scoutmaster
- Trained 96 youth participants and led 16 staff members at week-long leadership training camp

## Peer-reviewed publications

### Political Science Quarterly

“The Race Gap in Precinct Wait Times: Why Minority Precincts are Underserved by Local Election Officials” Fall 2017

### Science

“Comment on *Estimating the Reproducibility of Psychological Science*” Mar. 2016

### International Journal of the History of Sport

“Hosting the Olympic Games: An Overstated Advantage in Sports History” Mar./Apr. 2016

### Journal of Quantitative Analysis of Sports

“How the West will be Won: Using Monte Carlo Simulation to Estimate the Effects of NHL Realignment” Sept. 2014

### Electoral Studies

“Strategic Politicians, Partisan Roll Calls, and the Tea Party” Mar. 2013

## Selected other publications

### Washington Post (3 articles)

“Pence’s Voter Fraud Commission will Almost Certainly ‘Find’ Thousands of Duplicate Registrations that aren’t Duplicates. Here’s Why.”

### FiveThirtyEight (6 articles)

“The 2014 Elections that Ended in a Tie”

“How to Tell If a March Madness Underdog is Going to Win”

### Wall Street Journal (5 articles)

“As NBA Playoffs Begin, Odds of Beating the Heat”

“Sochi Olympics: Why Canada will Rule in Hockey”

### Deadspin (6 articles)

“11 Million Brackets vs. ESPN, CBS, and Fox Experts: Who was Better?”

“How Those 3-on-3 Overtime Rules Would Cut Down NHL Shootouts”