

# William Brannon

will.brannon@gmail.com

60 Wadsworth St  
Cambridge, MA 02142

## Summary

Data scientist, analyst and manager with a background in political analytics. Strong technical skills, and experience in high-pressure situations.

## Contact

☎ (571) 432-7177

🏠 wbrannon.io

🐙 Github: wwbrannon

## Technical Skills

**Languages:** Python, R, C/C++, SQL, bash, Stata,  $\LaTeX$ , HTML, CSS

**Frameworks:** SciPy stack, sklearn, Jupyter

**Databases:** MySQL, PostgreSQL, Vertica, MS SQL Server

**Automation:** Docker, Travis, AWS CodeBuild / CodePipeline, AWS ECS

**Tools:** git, subversion, flex, bison

## Projects

**Ado:** Open-source Stata interpreter ([Link](#))

**sqlscore:** R utilities for database-backed scoring of generalized linear models ([Link](#))

**schemeR:** A Lisp-like mini-language for R, including support for macros ([Link](#))

## Languages

**English** (native)

**German** (fluent)

## Education

[Massachusetts Institute of Technology \(MIT\)](#)

Ph.D., Social and Engineering Systems

08/2017 - present

Boston, MA

[College of William & Mary](#)

B.S., Mathematics, International Relations

*Summa cum laude, Phi Beta Kappa*

08/2007 - 05/2011

Williamsburg, VA

## Selected Experience

[Democratic National Committee](#)

Data Scientist

09/2015 - 08/2017

Washington, DC

- Led DNC Data Science work on fundraising analytics, including modeling and experiments, and owned stakeholder relationships.
- Built a scalable Docker-based model production infrastructure, with a custom sklearn-based framework for scoring and Amazon ECS for deployment. The new infra enabled automatic refreshes of all DNC scores, a program first.
- Data pipeline engineering: improvements in data prep processes sped up pipelines by as much as 50%.
- Completely revamped survey data processes, with a new data model and tools reducing workload by nearly a full-time equivalent.
- Developed national and state-specific predictive models, including models of vote choice and voter turnout.

[Hillary for America](#)

Data Scientist

07/2016 - 11/2016

New York, NY

- July to Nov, 2016: seconded to the Clinton campaign's data science team.
- Owned analytics for a large direct marketing program, doing model-based targeting, reporting and analysis.
- Developed infrastructure for election-night reporting and model scoring, including several Docker microservices.

[Analyst Institute](#)

Director of Analytics

11/2013 - 09/2015

Washington, DC

- Managed a team of up to six analysts in conducting and analyzing political field experiments and building models.
- Led the analyst hiring process and hired four analysts, a 100% increase in team size.
- Developed software in R to build models of experimental treatment response.

[Democratic Senatorial Campaign Committee](#)

Analytics Manager

02/2013 - 11/2013

Washington, DC

- Modeling and analysis of online fundraising, incl. A/B tests of email features.
- New ask amount models saw a 10% increase in average donation.

[Obama for America](#)

Deputy Data Director / Associate Analyst

02/2012 - 11/2012

Chicago, IL

- Deputy Data Director: detailed to Ohio for early-voting analytics, including reporting for senior leadership.
- Associate Analyst: data infra engineering and digital analytics, using billion+ row datasets in a Vertica DB.