

# Sam Portnow

**Senior Statistician** | Rockville, MD | <https://sam-portnow.netlify.app> | [sam.portnow@gmail.com](mailto:sam.portnow@gmail.com) | (781) 367-6012

Interdisciplinary psychologist with excellent quantitative and programming skills.

## SKILLS

R Python javascript SQL git shiny Stan AWS

## WORK EXPERIENCE

### **US Government Accountability Office, Senior Statistician** Jul, 2019 - Current

- Developed machine learning model to separate 10 million heterogeneously formatted comments into structured data, enabling identification of potentially fraudulent comments
- Performed cluster analysis to identify potentially fraudulent comments
- Developed custom Named Entity Recognizer to identify identity information contained within comments, saving analysts hours of time manually extracting the necessary identity information
- Employed multilevel modeling to describe teachers' behaviors towards students while accounting for school effects
- Employed logistic regression to detect racial disparities in sentencing in military court across the military
- Developed interactive maps to explore USAID funding to foreign countries over the past five years
- Organized and led efforts to update and maintain R
- Designed and implemented sample design to validate cleaning of employer names across twenty different state agencies

### **US Government Accountability Office, Data Analyst** Jan, 2017 - Jun, 2019

- Employed NLP to identify themes across a longitudinal survey that included open-ended responses, saving analysts hours of work in manually identifying themes
- Employed Natural Language Processing with word vectors to identify duplicative IT contracts across millions of contracts
- Built a Shiny web application in R to create graphs that conformed to Government Accountability Office standards, expediting the process of graphic creation
- Organized several brown bags on best practices in data storage and manipulation

### **Sam Portnow Consulting, Owner** Mar, 2016 - Current

- Coordinated a team of data scientists and research analysts to build a pipeline that deployed and summarized companies' annual surveys
- Performed Item Response Theory Analyses of surveys
- Developed questionnaires assessing consumer satisfaction

### **University of Virginia, Graduate Student Researcher** Aug, 2012 - May, 2017

- Used causal inference techniques to statistically inspect the effect of an increase in family income on parenting behaviors and child achievement
- Supervised an undergraduate Honor's Thesis from conception to publication
- Coordinated efforts between psychologists and software engineers in the creation of a web-based intervention, MindTrails (<https://mindtrails.virginia.edu/>).

## EDUCATION

**University of Virginia, Doctor of Philosophy (Ph.D.), Psychology** 2012 - 2017

**New York University, Bachelor's degree, Psychology** 2005 - 2009