

# JOSHUA J FINK

PHD CANDIDATE, STATISTICIAN, AND NBA ANALYST



## PROFILE

A data scientist and statistician interested in using modern Bayesian computational methods and data visualization techniques to expand and contribute to sports analytics and social science.

## EDUCATION

**Ph.D.,  
Sociology**

Duke University,  
Expected 2016

**M.S.,  
Statistical Science**

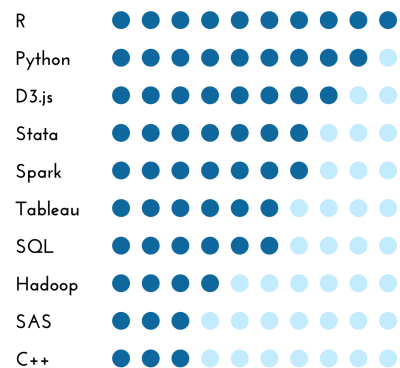
Duke University,  
Earned 2015

**B.A.,  
Sociology + Stats**

Pepperdine University,  
Cum Laude 2011

## EXPERTISE

I specialize in data visualization and building Bayesian predictive models with Markov Chain Monte Carlo (MCMC) samplers (and other stochastic processes). I also have experience using a variety of clustering algorithms and managing large databases with tools such as Apache Spark and HDFS. My preferred work-flow would involve Spark, R, and/or Python for data cleaning and analysis, and R or D3.js for visualization. I am also proficient in git, Amazon Web Services (AWS), JavaScript, and the UNIX shell.



## SELECTED EXPERIENCE

### San Antonio Spurs

Data Visualization & Analytics Fellow

August 2016-present

Perform Bayesian voodoo with basketball data and draw pretty pictures with Kirk Goldsberry

### San Antonio Spurs

Data Visualization and Statistics Consultant

February 2016-August 2016

Analyze player tracking data from Synergy & Second Spectrum datasets, create interactive javascript visualization dashboards to be used by front office personnel and coaches, build predictive models of player performance.

### American Statistical Association: Washington, DC

Law & Justice Statistics Committee Data Analyst and Researcher

February 2015-present

Maintain databases and perform statistical analyses related to U.S. crime and policing, with a significant focus on implementing Machine Learning techniques.

## RESEARCH

### Race and Consumption: Examining the Role of Structural Price Constraints with Hybrid Effects Models

Charron-Chénier, Raphaël, Joshua Fink, Lisa A. Keister

Sociology of Race and Ethnicity

### Age, Structure, and Neighborhood Homicide: A Latent Trajectory Model of the Differential Institutional Engagement Hypothesis

Dollar, Cindy, Patty McCall, Ken Land, Joshua Fink

Journal of Quantitative Criminology, R&R

### Class, Crime, and Latent Classes of Crime: A Bayesian Approach to a Persistent Enigma

Fink, Joshua

Criminology, under review