

# BRIAN KIM

3717 Cardiff Avenue, Apt.207, Los Angeles, CA 90034  
(626) 224 - 8488 ◊ kimbrianj@ucla.edu

## EDUCATION

---

**University of California, Los Angeles**  
Ph.D. in Statistics

*October 2017*

**Dissertation: Population Size Estimation using Multiple Respondent-Driven Samples**

I develop a model for estimating the size of a hard-to-reach population (e.g. people at high risk for HIV) using respondent-driven sampling (RDS) data, applying capture-recapture concepts and using the respondents' personal network size and ordered nature of RDS data.

**Amherst College**  
B.A. in Mathematics & Philosophy  
Graduated with Honors in Mathematics

*June 2012*

## RESEARCH INTERESTS

---

- Social Network Analysis
- Network Sampling Methods, particularly Respondent-Driven Sampling
- Population Size Estimation: Capture-Recapture and Multiple List methods

## EXPERIENCE

---

**Lecturer**  
*UMD Joint Program in Survey Methodology*

10/17 - Present

- Provided consulting and guidance as a facilitator with the Applied Data Analytics (ADA) program for teaching data analytics (including record linkage, text analysis, network analysis, and machine learning) to working professionals in public policy.
- Worked with a team to develop introductory Python and SQL material for use in the ADA program as well as for online courses.
- Developed and taught a 12-week online course to review introductory statistics material for students entering the graduate program.

**Statistical Consultant**  
*UCLA Institute for Digital Research and Education*

5/14 - 6/16

- Assisted clients in cleaning, merging, and preparing data for analysis.
- Helped graduate students and professors with their dissertations, publications, and other projects using methods such as mixed modeling, PCA, simulation, and more using a variety of statistical software, including R and Stata.

**Academic Mentor**  
*UCLA Institute for Pure and Applied Mathematics*

6/15 - 8/15, 6/16 - 8/16, 6/17 - 8/17

- Mentored a team of four undergraduate students with a research project as part of a summer program called Research in Industrial Projects for Students (RIPS) in which an industry sponsor provides a real problem of interest for the company. Sponsors were Twitter and The Aerospace Corporation.
- Provided a cooperative team environment for research by encouraging collaboration between students.
- Guided students through presenting their work to a larger audience.

## RESEARCH

---

*Undergraduate Thesis: Using Pitch F/X Data to Evaluate Pitchers*

March 2012

## TEACHING

---

### University of Maryland

10/17 - Present

*Instructor*

- SURV 699C: Introduction to Python & SQL (Summer 2018)
- SURV 699M: Review of Statistical Concepts (Summer 2018)

### University of Maryland

3/18

*Teaching Assistant*

- SURV 751: Big Data and Machine Learning (Spring 2018)

### University of California, Los Angeles

1/17 - 3/17

*Instructor*

- Stat 98T: Six Degrees of Separation: Studying the World Through Social Networks (Winter 2017)

### University of California, Los Angeles

9/13 - 6/16

*Teaching Assistant*

- Stat 10: Introduction to Statistical Reasoning (Fall 2013)
- Stat 10: Introduction to Statistical Reasoning (Winter 2014)
- Stat 10: Introduction to Statistical Reasoning (Spring 2014)
- Stat 10: Introduction to Statistical Reasoning (Fall 2014)
- Stat 10: Introduction to Statistical Reasoning (Winter 2015)
- Stat 10: Introduction to Statistical Reasoning (Spring 2015)
- Stat 10: Introduction to Statistical Reasoning (Fall 2015)
- Stat 10: Introduction to Statistical Reasoning (Winter 2016)
- Stat 10: Introduction to Statistical Reasoning (Spring 2016)

## AWARDS

---

**TA of the Year**

2016

**Dissertation Year Fellowship**

2016

**Collegium of University Teaching Fellows**

2016

## TECHNICAL STRENGTHS

---

### Statistical Software

Highly skilled in R, including integrating C++ with R using Rcpp. Knowledge of SQL, Python, and Stata.

### Statistics

Highly skilled in a variety of methods, including but not limited to hypothesis testing, regression, mixed models, clustering analysis, social network analysis, social network models, network sampling methods, Monte Carlo simulation, Bayesian models, and more.

### Other Software

Skilled or proficient in the use of many other programs, including, but not limited to, Microsoft Word, Excel and Powerpoint; LaTeX.