

Brook Luers

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Department of Statistics
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1085 South University
Ann Arbor, MI 48109

EDUCATION

Ph.D., Statistics (in progress)

University of Michigan, Ann Arbor, MI

Passed qualifying exams, May 2016

M.S., Statistics, May 2015

University of Wisconsin-Madison, Madison, WI

GPA: 3.78 out of 4.0

B.A., Mathematics, May 2012

Oberlin College, Oberlin, OH

GPA: 3.81 out of 4.0

PROFESSIONAL/RESEARCH EXPERIENCE

University of Michigan, Ann Arbor, MI

Graduate Research Assistant

Large-scale observational data

Spring 2017–present

Supervised by Kerby Shedden, Ph.D.

Statistical methods and software for large-scale observational data. We are applying one-pass dimension reduction algorithms to naturalistic driving data from the Integrated Vehicle-Based Safety System to characterize inter-driver variability in braking behavior.

Sequential decision making in mobile health

June 2016–June 2017

Supervised by Susan Murphy, Ph.D.

Performed data management tasks and statistical analysis for the results of a micro-randomized trial of HeartSteps, an mHealth intervention to increase physical activity among patients who completed cardiac rehabilitation. Developed a time-varying standardized effect size for the micro-randomized trial design.

The University of Wisconsin-Madison, Madison, WI

Project Assistant

Spring 2015

Created realistic data sets and example research problems for use in a new Master's-level statistical methods and data analysis course.

Epic Systems Corporation, Verona, WI

Business Intelligence Developer

July 2012–June 2013

Developed reporting content and utilities for hospital admissions data using Intersystems Caché, SQL, and Crystal Reports. Supported Epic customers and staff using Epic reporting tools.

American Institutes for Research, Washington, D.C.
Research Assistant

Summer 2011

Supported staff at the National Center for Education Statistics working on the Integrated Postsecondary Education Data System (IPEDS). Developed web tutorials for the IPEDS data collection system. Fulfilled data requests in SAS using IPEDS data.

PUBLICATIONS AND PRESENTATIONS

Luers, B., Klasnja, P., and Murphy, S.A. Standardized effect sizes for preventive mobile health interventions in micro-randomized trials. (Revised and resubmitted)

HeartSteps: A Case Study in Trial Design and Evaluation of Mobile Health Interventions (poster presentation). Michigan Institute for Data Science Annual Symposium, Ann Arbor, MI. November 2016.

TEACHING EXPERIENCE

University of Michigan, Ann Arbor, MI
Department of Statistics

Teaching Assistant
STATS 306, Introduction to Statistical Computing Fall 2017

Teaching Assistant
STATS 412, Introduction to Probability and Statistics Spring 2016

Teaching Assistant
STATS 250, Introduction to Statistics and Data Analysis Fall 2015

University of Wisconsin-Madison, Madison, WI
Department of Statistics

Instructor
STAT 301, Introduction to Statistical Methods Fall 2014

Teaching Assistant
STAT 301, Introduction to Statistical Methods Spring 2014

Teaching Assistant
STAT 224, Introductory Statistics for Engineers Fall 2013

Summer Institute for Training in Biostatistics, Madison, WI
University of Wisconsin-Madison

Teaching Assistant
Introduction to Biostatistics, Biostatistics Practicum Summer 2014

Oberlin College, Oberlin OH
Department of Mathematics

Calculus Tutor Fall 2009–Spring 2010, Spring 2011

Statistics Grader Spring 2012

HONORS AND AWARDS

Honorable Mention, Outstanding Graduate Student Instructor, University of Michigan (Spring 2016)

Member, Phi Beta Kappa Society (May 2012)

Junior Fellow, Joint Program in Survey Methodology (Summer 2011)

SKILLS

Statistical modeling and inference

Data analysis and visualization

Programming languages: R, Python, Go, C, SQL, Intersystems Caché

Typesetting and productivity: \LaTeX , Microsoft Office, Windows and Unix-like operating systems