Brook Luers

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Department of Statistics
311 West Hall
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.
Characterizing inter-driver variability in braking behavior with one-pass dimension reduction techniques applied to naturalistic driving data. Statistical methods and software for streaming data analytics.

Sequential decision making in mobile health   June 2016–June 2017
Supervised by Susan Murphy, Ph.D.
Performed data management and statistical analysis for the results of a micro-randomized trial of HeartSteps, an mHealth intervention to increase physical activity among cardiac rehabilitation patients. 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 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 Institues 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

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

Klasnja, P., Smith, S., Seewald, N.J., Lee, A., Hall, K., **Luers, B.**, Hekler, E.B. and Murphy, S.A. Effectiveness of contextually-tailored suggestions for physical activity: A micro-randomized trial of HeartSteps. (submitted)

PRESENTATIONS

Luers, B. and Shedden, K. Fingerprinting individual driving behavior with vehicle kinematics data and dimension reduction regression. Michigan Institute for Data Science Annual Symposium, Ann Arbor, MI. October 2017. (poster)

NeCamp, T., Yoo, H., **Luers, B.**, Cho, A., Seewald, N., Klasnja, P., and Murphy, S.A. HeartSteps: A Case Study in Trial Design and Evaluation of Mobile Health Interventions. Michigan Institute for Data Science Annual Symposium, Ann Arbor, MI. November 2016. (poster)

TEACHING EXPERIENCE

University of Michigan, Ann Arbor, MI

Department of Statistics

>   Teaching Assistant
>   Introduction to Statistical Computing   Fall 2017

>   Teaching Assistant
>   Introduction to Probability and Statistics   Spring 2016

>   Teaching Assistant
>   Introduction to Statistics and Data Analysis   Fall 2015

University of Wisconsin-Madison, Madison, WI

Department of Statistics

>   Instructor
>   Introduction to Statistical Methods   Fall 2014

>   Teaching Assistant
>   Introduction to Statistical Methods   Spring 2014

>   Teaching Assistant
>   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

Progamming languages: R, Python, Go, C++, C, SQL, Intersystems Caché

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