Department of Mathematics and Statistics South Dakota State University

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Education

Ph.D. Student Computational Science and Statistics

South Dakota State University Expected Graduation Spring 2025

Advisor and Chair: Christopher Saunders

M.S. Mathematics with emphasis in Statistics

South Dakota State University

Thesis: U-Statistics for Characterizing Forensic Sufficiency Studies

August 2017

Advisor and Chair: Christopher Saunders

B.S. Mathematics and Statistics South Dakota State University May 2015

Employment

Graduate Research Assistant South Dakota State University May 2017-August 2017 to Christopher Saunders May 2018-present

Graduate Teaching Assistant South Dakota State University 2015-present

Remedial College Algebra Proctoring and Teaching Assistant

Undergraduate College Algebra Proctoring, Grading, and Teaching Assistant

Undergraduate Pre-Calculus Proctoring

Undergraduate Calculus I Proctoring, Grading, and Teaching Assistant Undergraduate Introduction to Statistics Proctoring, Grading, and Teaching Assistant

Graduate Modern Applied Statistics I Directing the Online Section Graduate Modern Applied Statistics II Directing the Online Section

Publications

In Preparation

Cami Fuglsby, Christopher P. Saunders, and JoAnn Buscaglia. U-Statistics for Estimating Performance Metrics in Forensic Handwriting Analysis. Currently redoing simulations related to new matching algorithms from my Masters work.

Presentations

Danica Ommen, Larry Tang, **Cami Fuglsby**. To differentiate or not to differentiate: An unholy love-affair between the Two-Stage and Bayesian approaches. CSAFE sponsored Symposium on Er-

ror Rates for Evidence Interpretation, Arlington, VA. Invited Presentation. Travel support provided by CSAFE. January 2018

Cami Fuglsby, Linton Mohammed, JoAnn Buscaglia, Christopher Saunders. Sufficiency and Complexity Factors in Handwriting Examination. Impression, Pattern, and Trace Evidence Symposium, Arlington, VA. Accepted Oral Presentation. *Travel support provided by NIJ and RTI*. January 2018

Cami Fuglsby. An Introduction to the Forensic Identification of Source Problem and Related Problems in Statistical Model Selection. Computational Science and Statistics Seminar, Brookings, SD. Oral Presentation.

Cami Fuglsby, Christopher P. Saunders, JoAnn Buscaglia, Danica Ommen. A Modified Two-Stage Approach to the Interpretation of Forensic Evidence. Joint Statistical Meetings, Vancouver, BC. Oral Presentation. August 2018

Linton Mohammed, **Cami Fuglsby**, Christopher P. Saunders, Danica Ommen, Michael Caligiuri, JoAnn Buscaglia. FDE Conclusion Scales: Rev. Bayes or Prof. Kirk? (Part I). The 76th Annual General Meeting of the American Society of Questioned Document Examiners, Park City, UT. Conference Attendance by Invitation Only. August 2018

Cami Fuglsby, Linton Mohammed, Christopher P. Saunders, Danica Ommen, Michael Caligiuri, JoAnn Buscaglia. FDE Conclusion Scales: Rev. Bayes or Prof. Kirk? (Part II). The 76th Annual General Meeting of the American Society of Questioned Document Examiners, Park City, UT. Conference Attendance by Invitation Only. August 2018

Danica Ommen, **Cami Fuglsby**, Christopher Saunders, Michael Caliguiri, Linton Mohammed, JoAnn Buscaglia. Pairwise Comparison Scores for Handwritten Questioned Documents. American Academy of Forensic Sciences 71st Annual Scientific Meeting. Baltimore, MD. Accepted February 2019

Posters

Cami Fuglsby, JoAnn Buscaglia, Christopher Saunders. Incomplete U-Processes for Forensic Sufficiency Studies in Questioned Document Examination. Joint Statistical Meetings, Baltimore, ML. Contributed Poster Presenter. August 2017

Cami Fuglsby, Christopher P. Saunders, JoAnn Buscaglia. Incomplete U-Processes for Forensic Sufficiency Studies in Questioned Document Examination. International Conference on Forensic Inference and Statistics, Minneapolis, MN. Contributed Poster Presenter. Travel Support provided by Stephen E. Fienberg CSAFE Young Investigator Award. September 2017

JenaMarie Baldaino, **Cami Fuglsby**, Danica M. Ommen, Christopher P. Saunders, Jack Hietpas, and JoAnn Buscaglia. Characterization of Aluminum Powders in Explosives Utilizing Particle Micromorphometry. International Conference on Forensic Inference and Statistics, Minneapolis, MN. September 2017

JenaMarie Baldaino, Danica M. Ommen, **Cami Fuglsby**, Christopher P. Saunders, Jack Hietpas, and JoAnn Buscaglia. Statistical Characterization of Commercial and Home-made Aluminum Powders in Explosives Using Automated Particle Micromorphometry. Impression, Pattern, and Trace Evidence Symposium, Arlington, VA. January 2018

JenaMarie Baldaino, Danica M. Ommen, **Cami Fuglsby**, Christopher P. Saunders, Jack Hietpas, and JoAnn Buscaglia. Statistical Characterization of Aluminum (Al) Powders in Explosives Using Automated Particle Micromorphometry. American Academy of Forensic Sciences 70th Annual Scientific Meeting, Seattle, WA. February 2018

Cami Fuglsby, Christopher P. Saunders, Danica M. Ommen, JoAnn Buscaglia. On the Use of Bayesian P-Values for Forensic Identification of Source Problems. 2018 International Society for Bayesian Analysis World Meeting, Edinburgh, UK. Travel Support provided by ISBA 2018 World Meeting Travel Awards. June 2018

Jena
Marie Baldaino, Danica M. Ommen, **Cami Fuglsby**, Christopher P. Saunders, Jack Hietpas, and Jo
Ann Buscaglia. Characterization of commercial and home-made aluminum powders via micromorphometric analysis. 8^{th} European Academy of Forensic Science Conference, Lyon, France. August 2018

Danica Ommen, **Cami Fuglsby**, Christopher Saunders, Michael Caligiuri, Linton Mohammed, JoAnn Buscaglia. Pairwise Scores for Designing Handwritten Document Comparisons. Forensics @NIST, Gaithersburg, MD. November 2018

Leadership and Service

National Service Supported the Expert Working Group on Human Factors in

Handwriting Examinations Interpretation and Technology

subgroup for the National Institute of Standards and Technology,

from 2017 to the conclusion of the working group in 2018

Participated in 2017 spring meeting for the Questioned Document subgroup for the Organization of Scientific Area Committees for

Forensic Science as a note taker

Served as the Executive Secretary for the Questioned Document subgroup for the Organization of Scientific Area Committees for

Forensic Science, 2018

Served as a member and the Executive Secretary for the

Questioned Document subgroup for the Organization of Scientific

Area Committees for Forensic Science, 2019

Refereeing Journal of Forensic Sciences (2017, 2018)

Departmental Organization Served as the president of the SDSU Math Club (2014-2015)

Volunteering Northeastern SD Chapter of Math Counts (2014, 2016, 2018)

Ready-SET-Go! Camp at South Dakota State University (2016,

2018)

GEMS Workshop at South Dakota State University (2019)

Professional Service International Conference on Forensic Inference and Statistics 2018

(Conference volunteer, chaired two sessions)

Invited participant on the CSAFE sponsored Symposium on Error

Rates for Evidence Interpretation, 2018

Joint Statistical Meetings (chair SPEED session August 2018)

International Workshop on Simulation and Statistics (Organize

Student Poster Session September 2019)

Awards and Honors

Stephen E. Fienberg CSAFE Young Investigator Travel Award [\$1500] 2017 ISBA 2018 World Meeting Travel Awards [\$500] 2018

NSF support to attend Preparing to Teach Workshop at JSM [\$800] 2018

Memberships

American Academy of Forensic Science - Questioned Documents American Statistical Association Institute of Mathematical Statistics International Society for Bayesian Analysis