Jeffrey Doser

14 Summer Glen Drive● Penfield, NY 14526
(585) 683-4170 ● doserjef@msu.edu

Education

- Michigan State University, Doctoral Student in Forestry, 2018-Present
- Michigan State University, M.S. in Applied Statistics, 2018-Expected December 2020
- State University of New York at Geneseo, B.S. Biology, B.A. Mathematics, Summa Cum Laude, 2014-2018

Research Experience

- Research Assistant, Michigan State University, Summer 2018-present
  - Adviser: Dr. Andrew Finley
  - Focus on developing Bayesian hierarchical models for environmental monitoring and decision making.
- Undergraduate Researcher
  - Lab of Dr. Kristina Hannam, Department of Biology, SUNY Geneseo, 2015-2018
    - Analysis of spatial and temporal variation of western New York soundscapes
  - Lab of Dr. David Meisel, Department of Physics and Astronomy, SUNY Geneseo, 2016-2018
    - Development of an automated bird song recognition system using wavelets, simple machine learning techniques, and a Raspberry Pi

Teaching Experience

- Teaching Assistant, Michigan State University, Summer 2018-present
  - Course: R Programming for Data Sciences
    - Co-authored course textbook (https://www.jeffdoser.com/files/_book/index.html)
    - Graduate Level
  - Course: Ecological Monitoring and Data Analysis
    - Undergraduate Level
    - Co-authored course textbook (https://www.jeffdoser.com/files/for472/_book/index.html)
- Undergraduate Lab Assistant, Introductory Biology Lab, Fall 2016

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Publications

- Teimouri, M., Doser, J. W., Finley, A. O. (2019) ForestFit: An R package for modeling tree diameter distributions. (In Review). Pre-print at [arXiv](#).
- Doser, J.W., Finley, A.O., Kasten, E. P., Gage, S. H. (2019) Using hierarchical Bayesian models to assess soundscape disturbance: a case study on a selectively logged northern Michigan forest. (In Review). Pre-print at [arXiv](#).
- Doser, J. W., Hannam, K. M, Finley, A. O. (2019) Characterizing functional relationships between technophony and biophony: A western New York soundscape case study. (In Review). Pre-print at [arXiv](#).

Presentations

- Doser, J., Hannam, K., Finley, A. 2019. Using hierarchical Bayesian models to analyze acoustic data. Oral presentation, XXVII International Bioacoustics Congress, Brighton, England.
- Doser, J., Hannam, K., Finley, A. 2019. Characterizing functional relationships between biophony and technophony: a western New York soundscape case study. Oral presentation, Northeast Regional Environmental Acoustics Symposium. Providence, RI.
- Doser, J., Meisel, D. 2018. Developing an automated bird song recognition system using wavelets and simple machine learning techniques. Oral presentation, Geneseo Recognizing Excellence, Achievement and Talent Day, Geneseo, NY.
- Doser, J., Hannam, K. 2017. Using soundscape maps to assess a local soundscape. Poster presentation, Middle States Division American Association of Geographers Annual Meeting, Geneseo, NY.
- Doser, J., Hannam, K. 2017. Analysis of seasonal temporal variation of soundscapes in western New York. Oral presentation, Northeast Regional Undergraduate Research, Scholarly and Creative Activity Conference for the Council of Pulbic Liberal Arts Colleges, Mansfield, PA.
- Doser, J., Hannam, K. 2017. Analysis of western New York forest soundscapes across spatial and temporal gradients. Twitter presentation, Biotweeps Twitter Conference.
- Doser, J., Meisel, D. 2017. Quest for signs of life in the midst of chaos. Poster presentation, Geneseo Recognizing Excellence, Achievement and Talent Day, Geneseo, NY.
- Doser, J., Hannam, K. 2017. Analysis of seasonal temporal variation of soundscapes in western New York. Oral presentation, Geneseo Recognizing Excellence, Achievement and Talent Day, Geneseo, NY.

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- Doser, J., Hannam, K. 2017. Analysis of seasonal temporal variation of soundscapes in western New York. Oral presentation, Northeast Natural History Conference, Cromwell, CT.
- Doser, J., Hannam, K. 2016. Analyzing soundscape temporal variation in western New York as a potential assessment of biological diversity. Oral presentation, Rochester Academy of Science Fair, Rochester, NY.
- Doser, J., Hannam, K. 2016. Use of soundscape recordings to analyze daily temporal variation in avian vocalizations in western New York. Poster presentation, North American Ornithological Conference, Washington D.C.

Grants/Scholarships

- Goldwater Scholarship, Nationwide, 2017
- SUNY Geneseo Undergraduate Travel Grant, Spring 2017
- Dr. Sorrell E. Chesin '58 Endowed Research Award, Fall 2016
- Geneseo Foundation Undergraduate Summer Fellowship, Summer 2016
- Dr. Wendell and Barbara Rhodes Research Award, Summer 2016
- Geneseo Foundation Scholarship, 2014-2018

Awards and Honors

- Excellence in Mathematics, SUNY Geneseo, 2018
- SUNY Chancellor's Award for Student Excellence, state-wide, 2018
- Pi Mu Epsilon Mathematics Honors Society, SUNY Geneseo, 2018
- Dr. Sam Molnar Scholar Athlete Award, SUNYAC, 2018
- Dr. Dan Mullin Scholar Athlete Award, SUNY Geneseo, 2018
- James Fulton Award for Academic and Athletic Excellence, SUNYAC, 2018
- Phi Beta Kappa Honors Society, SUNY Geneseo, 2017
- Sigma Xi Research Society, Associate Member, Nationwide, 2017
- Google Cloud/CoSIDA Academic All-District, Regional, 2017-2018
- SUNY Chancellor's Scholar-Athlete Award, SUNYAC, 2016-2018
- Winter Scholar Athlete of the Year, SUNYAC, 2016-2018
- President's List, SUNY Geneseo, Spring 2016
- Dean's List, SUNY Geneseo, Fall 2014 - Spring 2018
- Edgar Fellows Honors Program, 2014 - 2018

Professional Positions

- Statistical Consultant, College of Agriculture and Natural Resources Statistical Consulting Center, Michigan State University, 2019 – present

- o Provide statistical and programming advice to undergraduate students, graduate students, and faculty members.
- Student Database Programmer, Computing and Information Technologies Department, SUNY Geneseo, 2016-2018
  - o Developed, modified, and tested Banner applications using SQL, Groovy, SQR, and the Argos Enterprise Reporting System
  - o Experience in managing and testing Oracle databases

Relevant Skills

- Computer Languages/Statistical Software
  - o Proficient: R, SQL
  - o Familiar: C++, Groovy, Matlab, SQR, Mathematica, Python, Java, Pl/SQL, C, SAS
- Software
  - o Latex/Knitr
  - o R Markdown/bookdown
  - o R Shiny

Leadership/Team Experience

- SUNY Geneseo Varsity Swimming and Diving, 2014-2018
  - o Captain, 2016-2018
  - o Team MVP, 2015-2018
  - o NCCA Championships participant, 2017-2018
  - o 14-time SUNYAC Conference Champion
- Student Athlete Advisory Committee, 2015-2018

Outreach

- Volunteer, Delta 4H Wildlife Club, Spring 2019
- Guest Speaker, French Road Elementary School, Brighton, New York, May 2018
  - o Discussed the importance of coding with a Raspberry Pi and applications of using a Raspberry Pi for sound recording.

Affiliations

- American Statistical Association, 2019 - present
- International Society of Ecoacoustics, 2019-present