Wyatt Madden m.s.

Lewis Hall Room 113 Department of Microbiology & Immunology Montana State University **✓** wyattgmadden@gmail.com ★ https://wyattgmadden.com

EDUCATION

Montana State University

2017 - 2019

M.S. in Statistics

University of California, Santa Cruz

2011 - 2015

Bachelor of Arts, Mathematics & Economics With Honors Bachelor of Arts, Film & Digital Media With Honors

RESEARCH Interests

Bayesian computation, spatio-temporal modeling, probabilistic machine learning & deep learning, data integration, Bayesian nonparametrics, variational inference and sequential Monte Carlo methods. Applications include viral surveillance, disease ecology, epidemiology and quality control.

SUBMITTED MANUSCRIPTS 1. Hoegh, A., Peel, A., Madden, W., Morris, A., Ruiz Aravena, M., Washburne, A., Plowright, R., "Estimating Viral Prevalence with Data Integration for Adaptive Two-Phase Pooled Sampling."

Invited Presentations Compartmental Models: Deterministic & Bayesian Approaches

Rocky Mountain Data Science

Nov 2020

Bozeman, Montana

R Studio in Action - DataFest Montana ASA Chapter Meeting Bozeman, Montana

Oct 2018

Professional

Bozeman Disease Ecology Lab

Bozeman, MT

EXPERIENCE

Statistician

Jan 2019 - Present

- Researched spatio-temporal data integration techniques for viral surveillance and prediction.
- Provided statistics & machine learning consulting for international team of scientists.
- Developed R packages to automate routine statistical analysis, visualization, and wrangling.
- Designed and implemented SQL database and data pipelines, ensuring data quality and access.

Weyerhaeuser

Seattle, WA

Statistics Intern

May 2020 - August 2020

- · Implemented machine learning models aimed at lowering defects in industrial processes, after diagnosing issues through exploratory visualization and analyses.
- Formulated mixed-model experimental designs.
- Developed Shiny web applications to automate data cleaning/wrangling workflows.

Accenture Analyst

Sacramento, CA

Jul 2016 – Apr 2017

• Improved loan approval processes through analysis of credit profiles.

Consulting &

Collaborator

Aug 2018 - Dec 2018

Collaboration EXPERIENCE

Statistical Consulting And Research Services (SCRS)

Department of Mathematical Sciences, Montana State University

TEACHING

MATH 105 - Contemporary Mathematics

Fall 2017, Spring 2018, Fall 2018

Department of Mathematical Sciences, Montana State University

Awards	Outstanding Graduate Student Award, Montana State University	May 2019
	Excellence in Data Visualization, ASA Data Fest - Montana State University	Apr 2018
Service	American Statistical Association Student Chapter at Montana State, Treasurer	2018 – 2019

Membership American Statistical Association