



Data Science Symposium

February 24, 2023

Event Info

- 🕒 9:00a - 5:00p MDT
- 📍 Corbett Ballroom Middle

DaSA Info

- 📍 SH 292B
- 🌐 datascience.nmsu.edu
- 🐦 @nmsuDaSA
- 📷 @nmsudasa
- ✉️ datascience@nmsu.edu

RCW Info

- 🕒 2/21 - 2/24
- 🌐 bit.ly/3kYOBDX
- ✉️ ovpr@nmsu.edu

Overview

We welcome you to the second annual Data Science Symposium, hosted by the Data Science and Application Center (DaSA) as part of the 2023 NMSU Research and Creativity Week.

The purpose of this symposium is to showcase the work of NMSU faculty, staff, graduate students, and postdocs whose research lies in the areas of artificial intelligence, machine learning, data science, big data, computational social science, and related application areas. The goal is to foster dialogue both between these scholars, as well as between the data science community and the larger university community.

The symposium is arranged by thematic area. That said, we hope that you stay for the entire symposium to learn about all of the innovative data science work that is happening outside of your home disciplines.

Refreshments are provided in the hallway.

Schedule

9:00a-9:05a Opening Remarks

Social, Behavioral, & Economic Sciences

9:05a-9:20a **Soyoung Jeon**, Department of Economics, Applied Statistics, & International Business

“Associations between Dust Exposures and Hospitalizations in Lubbock, Texas, USA”

9:25a-9:40a **Sangwon Lee & Marshall A. Taylor**, Departments of Communication Studies & Sociology

“Who is Trusting and Distrusting Science? Evidence from a Computational Approach”

9:45a-10:00a **Donovan Fuqua**, Department of Accounting & Information Systems

“Data Science Research Aligned with the Center for Supply Chain Entrepreneurship (CSCE)”

10:05a-10:20a **Michael C. Hout**, Department of Psychology

“Avoiding Pitfalls in Eye Movement Research”

10:25a-10:40a **Ani Ter-Mkrtchyan & Marshall A. Taylor**, Departments of Government & Sociology

“Mapping the Discursive Field of Environmental Protection and Conservation Nonprofits on Social Media”

10:40a-10:55a Q&A

10:55a-11:15a Break

Computer Science & Engineering

11:15a-11:30a **Fatemeh Ali Akbari**, Department of Civil Engineering

“Estimating the Nonlinear Modeling Parameters for Masonry In-filled RC Frames in Support of Performance-Based Seismic Engineering using Machine Learning”

About DaSA

? What is DaSA?

! The Data Science and Applications (DaSA) Center is the point of connection for faculty, students, and staff at New Mexico State University who work in the areas of data science, computational social science, artificial intelligence, and digital humanities.

? What is the purpose of DaSA?

! The purpose of DaSA is four-fold. **First**, DaSA is an “expertise hub” that brings together researchers from across the NMSU campus who can collaborate or consult with research teams inside and outside of the university in need of a data science skill set, and find and collaborate with one another on projects and funding opportunities.

Second, DaSA functions as a centralized presence through which NMSU undergraduates and Data Analytics masters students may find faculty with whom they’d like to potentially work via independent study, work study, or volunteering.

Third, DaSA provides office space with computers outfitted with various data science software for students and postdocs of faculty affiliates.

Lastly, DaSA facilitates interdisciplinary programming in the form of workshops, symposia, and colloquia where scholars inside and outside of the NMSU community share their works.

11:35p-11:50p	Dang Pham , Department of Computer Science “Neural Topic Models for Hierarchical Topic Detection and Visualization”
11:55a-12:10p	Sanuj Kumar , Department of Computer Science “A Word Embedding Topic Model for Robust Inference of Topics and Visualization”
12:15p-12:30p	Abdur Rasheed , Department of Civil Engineering “Prediction of Bridge Columns Failure using Machine Learning”
12:35a-12:50a	Erick Draayer , Department of Computer Science “Reevaluating the Change Point Detection Problem with Segment-based Bayesian Online Detection”
12:50p-1:05p	Q&A

“Artificial Intelligence for Civil Engineers” Poster Session

1:10p-2:05p Get some refreshments and chat with the poster presenters!

Life, Physical, & Environmental Sciences

2:10p-2:25p	Melakeneh Gedefaw , Department of Animal & Range Sciences TBD
2:30p-2:45p	Nancy Chanover , Department of Astronomy “NASA’s Planetary Data System Atmospheres Discipline Node: Big Data from Distant Worlds”
2:50p-3:05p	Md Masudur Rahman , Department of Geography & Environmental Studies “Water Security Mapping and Modeling: A Systematic Review”
3:10p-3:25p	Atikulo Hoque , Department of Geography & Environmental Studies “Monitoring Woody Plant Encroachment with Remote Sensing”
3:30p-3:45p	Torit Chakraborty , Department of Geography & Environmental Studies “Predicting the Distribution of Acequia using Geospatial Artificial Intelligence”
3:50p-4:05p	Jordan Ellison , Department of Fish, Wildlife, & Conservation Ecology “Utilizing Google Earth Engine in Ecological Research”
4:10p-4:25p	Otis Akraasi , Department of Geography & Environmental Studies “Land Cover Changes in The Darién and Emberá Provinces, Panama, before and during the COVID-19 Pandemic”
4:30p-4:45p	Jason Montclare , Department of Mathematical Sciences “Contemporary Applications of Data Science to Neurosurgery”
4:45p-5:00p	Q&A