

2023 SDSU Data Science Symposium Schedule

Monday, February 6, 2023				
Time	Pasque Room (255)	Dakota Room A/C (250)	Pheasant Room A/C (253)	
12:30-5:00 p.m.	Check-in/Registration, Prairie Lounge			
1:00-5:00 p.m.	WORKSHOP 1 <i>Intro to Blockchain</i> Canceled	WORKSHOP 2 <i>Intro to Python</i> Seth Friesz	WORKSHOP 3 <i>Text Data Analytics/NLP with Python</i> David Zheng	
6:00-6:30 p.m.	Banquet, Performing Arts Center			
6:30-8:00 p.m.	Social Time (cash bar)			
7:15-7:30 p.m.	Dinner			
7:30-8:30 p.m.	Welcome, Kurt Cogswell, Head, Department of Mathematics and Statistics			
	Keynote: <i>Unraveling Complex Problems: Applying Systems Thinking in Data Science</i> , Ryan Nichols, Data Science & Analytics Advisor, TransUnion			
Tuesday, February 7, 2023				
Time	Dakota Room A/C (250)	Pheasant Room A/C (253)	Herold Crest (253C)	Pasque Room (255)
7:30 a.m.-noon	Check-in/Luggage Check, Volstorff Lounge			
7:45-8:15 a.m.	Breakfast, Volstorff B			
8:30-8:45 a.m.	Opening Session: <i>Welcome and Introduction</i> , Dr. Rajesh Kavasseri, Associate Dean of Research, Lohr College of Engineering, Volstorff B			
8:45-9:45 a.m.	Keynote: <i>Zip Code & Address Change — Using Innovative Data Analytics to Predict & Impact Health Outcomes</i> , Emily Griese, Volstorff B			
9:50-10:50 a.m.	Session 1 Finance Chair: Valerie Reed Improving Customer Experience Through Natural Language Processing Valerie Reed & Paige Pennock, First Premier Bank Utilizing Cloud Resources to Develop and Deploy Machine Learning Solutions Eric Stratman, ValidiFI	Session 2 Application Chair: Andrew Simpson Effect of Boom Leveling on Spray Dispersion Travis Burgers, Raven Industries AI-driven Wheat Yield & Protein Content Forecasting Using UAV Remote Sensing Mohammad Billah, SDSU	Session 3 Bioinformatics Chair: Xijin Ge, SDSU Cancer Trial Match: A Web Application for the Curation and Matching of Clinical Trials at a Precision Oncology Center Priya Swaminathan, Avera Cancer Institute An "Arg" to Comprehend Genetic Constraint Suvobrata Charavarty, SDSU	Session 4 Mathematical Machine Learning Chair: Randy Hoover, SDSMT Overview of Deep Learning and Universality Micheal Puthawala, SDSU Advancing Machine Learning Through Multilinear Subspace Methods Cagri Ozdizmir, SDSMT
10:50-11:00 a.m.	Networking Break Exhibitors, Volstorff A			
11:00 a.m.-noon	Session 5 Finance Chair: Thomas Brandenburger, SDSU Equipment Finance Securitization — Driving Business Value Through Advanced Analytics Ed Krueger, Sebastian Sowada and Brandon Thomson, Channel Partners	Session 6 Data Science & AI Chair: Dhiraj Sharan, Query.AI Parallel and Distributed Query Engine for Federated Searching Kyle Putnam, Query.AI Talk to Your Data with ChatGPT and RTutor.ai Steven Ge, SDSU	Session 7 Methods Chair: Theo Anim Bediako Finding Needles in Haystacks: Rare Category Detection Using Semi-supervised Active Learning Rohan Loveland, SDSMT Robustness Analysis of Convolutional Layers in Image Classification Neural Networks Gabriel Picioroaga, USD Would AI Stocks Estimate Be as Surprised to USDA Stock reports as Private Market Analysts? Asif Chowdhury, SDSU	Session 8 Forensics Statistics Chair: Christopher Saunders, SDSU Statistic Discrimination Methods for Forensic source Interpretation of Aluminum Powders in Explosives Danica Ommen, Iowa State University Assessing Error Rates in Multiple Examiner Groups using Regression Methods Larry Tang, University of Central Florida Ensemble of Score Likelihood Ratios for the Common Source Problem Federico Veneri, Iowa State University
noon-1:00 p.m.	Lunch, Volstorff B Poster Session, Volstorff A			
1:00-2:00 p.m.	Poster Session Student Poster Competition, Volstorff B			
1:00-2:30 p.m.	Job Fair/Recruiting Exhibitors, Volstorff B			
2:00-3:00 p.m.	Panel Discussion <i>Discussant</i> , Michael Lim, TransUnion Volstorff B			
3:00-4:00 p.m.	Session 9 Methods Chair: Clarissa Giefer Don't Solve the Wrong Problem! Cautionary Tales of Data Science in the Industry Jeremy Werner, Allstate	Session 10 Student Speed Presentation Chair: Dylan Borchert 2D respiratory sound analysis to detect lung abnormalities Rafia Alice A Characterization of Bias Introduced into Forensic Source Identification when there is a Subpopulation Structure Dylan Borchert A novel approach to detect COVID-19 fake news by mining biomedical information from news articles Jordan Smith Two-Stage Approach for Forensic Handwriting Analysis Ashlan Simpson Models for Predicting Maximum Potential Intensity of Tropical Cyclones Iftekhhar Chowdhury	Session 11 Methods Chair: Jason Hasse Can Machine Learning Predict Particle Deposition at Specific Intranasal Regions Based on Computational Fluid Dynamics Inputs/Outputs and Nasal Geometry Measurements? Mohammad Akash, SDSU Skip-GCN: A Framework for Hierarchical Graph Representation Learning Jackson Cates, SDSMT	Session 12 Machine Learning Applications Chair: Randy Hoover, SDSMT Analysis of State and Parameter Estimation Techniques using Dynamic Perturbation Signals Timothy Hansen, SDSU Active Learning to Minimize the Possible Risk from Future Epidemics KC Santosh, USD
4:00-4:10 p.m.	Break			
4:10-4:30 p.m.	Closing Session Poster Winners Announced, Thomas Brandenburger, Volstorff B			

Poster Presentations

Alice Rafia, 2D Respiratory Sound Analysis to Detect Lung Abnormalities

Theophilus Anim Bediako, Covariance Based Clustering for Classification

Dylan Borchert, A Characterization of Bias Introduced into Forensic Source Identification when there is a Subpopulation Structure in the Relevant Source Population.

Iftekhhar Chowdhury, Models for Predicting Maximum Potential Intensity of Tropical Cyclones

Jason Hasse, Application of Gaussian Mixture Models to Simulated Additive Manufacturing

Akosua Okyere-Addo, Spatial Data Analysis for Traffic Safety Network Screening

S. M. Rahat Rashedi, Spatial Data Analysis for the Development of Expected Adverse Weather Charts for Transportation Construction Projects

Sherryl Mae Rowe, What are your Strengths?: An Analysis of the Correlation of Strengths and Majors

Karissa Scipke, Temporal Tensor Factorization for Multidimensional Forecasting

Andrew Simpson, Finite Mixture Modeling for Hierarchically Structured Data with Application to Keystroke Dynamics

Ashlan, Simpson, Two-Stage Approach for Forensic Handwriting Analysis

Jordan Smith, A novel approach to detect COVID-19 fake news by mining biomedical information from news articles

Anna Stevens, Comparing Crime Rates Before and After the Covid-19 Pandemic in the United States

Miranda Vander Berg, The Relevance of Shame Across Time and Location