The 2017 MIDAS Symposium

Student Poster Competition

October 11
Michigan League

The poster competition includes data science research presentations from students, faculty and staff of the University of Michigan.

Only students are eligible for the awards, which carry cash prizes.

The awards are:
• Most Innovative Use of Data
• Most Likely Societal Impact
• Most Interesting Methodological Advances
• Most Likely Transformative Scientific Impact
• Most Likely Health Impact
• Best Overall

The poster session will be held between noon and 1:30 p.m. Posters will be on display and authors will be available to discuss their work during this time.

The winning posters will be announced at the conclusion of the symposium in the Rackham Auditorium at 5:30 p.m.

#	Title, Lead Author, Role	Domain
1.	Mining Student Behaviors to Predict Exam Scores Pery Samson, Faculty	Learning Analytics
2.	Supporting a Learning Higher Education System With Partial Feedback Tim McKay, Faculty	Learning Analytics
3.	A machine learning approach to predict Parkinson's disease through phone sensor data Xinlin Song, Graduate Student	Health
4.	Nonparametric Preference Completion Julian Katz-Samuels, Graduate Student	Methodology, Health
5.	Focal Mechanisms Inversion: A Markov Chain Monte Carlo Approach Russel Wilcox-Cline, Graduate Student	Methodolog, Geophysics
6.	Data Biases Undermine Geospatial Inference Using Location-Based Crowdsourced Data Chuan Liao, Staff	Methodology, Urban Planning / Transportation
7.	Can Missing Patterns in Covariates Improve Imputation for Missing Data? Micha Fischer, Graduate Student	Methodology
8.	Deep Design: Product Aesthetics for Heterogeneous Markets Yanxin Pan, Graduate Student	Methodology, Marketing
9.	Integrated Prediction of Wind Power Production Jingxing Wang & Abdullah Alshelahi, Graduate Students	Methodology, Energy
10.	Hyperparameter Selection for Online Learning with Partial Feedback Feng Wei & Aniket Anand Deshmukh, Graduate Students	Learning Analytics
11.	Changes in Primary Noncardiac Diagnoses Over Time Among Elderly Cardiac Intensive Care Unit Patients in the United States Shashank Sinha, Graduate Student	Health
12.	Chemical Shift guided RNA structure prediction Sahil Chhabra, Graduate Student	Health
13.	The Data4Good Center Ed Happ, Faculty	Methodology, Management, Policy
14.	Local Differential Privacy for Physical Sensor Data and Sparse Recovery Audra McMillan, Graduate Student	Methodology
15.	Understanding Questions with Object and Action Terms: Multimodal topic modeling of student questions in Piazza SungJin Nam, Graduate Student	Learning Analytics
16.	Demographic-Aware Word Associations Aparna Garimella, Graduate Student	Learning Analytics
17.	Application of machine learning to cryo-electon microscopy for protein structure determination Michael Cianfrocco, Faculty	Health
18.	Data Analytics for Optimal Detection of Metastatic Prostate Cancer Selin Merdan, Graudate Student	Health

19. Artificial Neural Network Model for Estimating   Health, Biosocial
Environmental Impacts of Chemicals
Ping Hou, Graduate Student

20. Real-Time Flood Forecasting Through   Methodology, Ecosystems
Data Fusion
Kevin Fries, Graduate Student

21. Evidence for Person-Specific Variation in the   Health
Structure of Affect and Implications for Affective Disorders
Katherine T. Foster, Graduate Student

22. Computational Social Science Workshop   Informational
Jeff Lockhart, Graduate Student

23. Fingerprinting individual driving behavior with   Transportation
vehicle kinematics data and dimension reduction regression
Brook Luers, Graduate Student

24. Personalized PageRank Estimation for Many Nodes: Methodology
The Impact of Clustering on Complexity
Daniel Vial, Graduate Student

25. Community detection via degree-corrected blockmodel   Methodology
with covariates
Yumu Liu, Graduate Student

26. Prediction on network-linked data by matrix   Methodology, Social
variate models
Xuefei Zhang, Graduate Student

27. Matching Graduate Applicants with   Methodology, Learning Analytics
Faculty Members
Shibamouli Lahiri, Graduate Student

28. Assessing Risk of Fibrosis Progression and Liver-Related   Health
Clinical Outcomes Among Patients with both Early Stage and
Advanced Chronic Hepatitis C
Monica Konerman, Faculty

29. High-Throughput Pipeline Workflow for 3D Cell   Health
Nuclear Morphological Modeling and Classification
Alexandr Kalinin, Graduate Student

30. Retrieval Algorithms Optimized for   Methodology, Learning Analytics
Human Learning
Rohali Syed, Graduate Student

31. Predicting Genome-Wide Transcription Factor   Health
Binding and Chromatin Architecture from Chromatin
Accessibility Data
Ricardo Albanus, Graduate Student

32. Optimally Weighted PCA for High-Dimensional   Methodology
Heteroscedastic Data
David Hong, Graduate Student

33. Foofah: Data Transformation By Example   Methodology
Zhongjun Jin, Graduate Student

34. Enabling Text Discourse Analysis for All   Learning Analytics
MOOC Researchers
Hui (Phoebe) Liang, Graduate Student

35. Sparse Network Tomography for Anomaly Detection   Methodology, Security
Elizabeth Hou, Graduate Student

36.	Localization and Approximations for Distributed Non-convex Optimization with Applications to Resource Allocation Hsu Kao, Graduate Student	Methodology
37.	A convex clustering formulation using the similarity matrix Yutong Wang, Graduate Student	Methodology
38.	Affiliation and Affect Changes of MOOC Discourse Jing Hu, Undergraduate Student	Learning Analytics
39.	Computable Hyper-Volume Phenotypes Hanbo Sun, Graduate Student	Health
40.	Predicting the Distribution of Emotion Perception: Capturing Inter-rater Variability Biqiao Zhang, Graduate Student	Learning Analytics
41.	Calibrating Big Data for population inference: applying quasi-randomization approaches to naturalistic driving data Ali Rafei, Graduate Student	Transportation
42.	MDST - Data Science Education through Public Service Arya Farahi, Graduate Student	Informational
43.	Data-driven methods in simulation modeling and optimization for large-scale dynamic systems Qiyun Pan, Graduate Student	Methodology
44.	Machine Learning for Compression Samuel Tenka, Undergraduate Student	Methodology
45.	Computational Testing of Scarf Algorithm for Near Feasible Stable Matching with Couples Dengwang Tang, Graduate Student	Methodology
46.	Detecting differentially expressed metabolic pathways with adjustments for macronutrient intake Teal Guidici, Graduate Student	Health
47.	Automated decision support system for stenosis detection in X-Ray coronary angiograms Reza Soroushmehr, Staff	Health
48.	Developing a web-based platform for clinical data adjudication Samuel Guan, Undergraduate Student	Health
49.	Optimal Estimation of Information Measures and their Applications Morteza Noshad, Graduate Student	Methodology
50.	Detecting Causal Effects on Mental Well-bing in Social Media Yaoyiran Li, Graduate Student	Health
51.	Impact of community structure on cascades Mehrdad Moharrami, Graduate Student	Social
52.	Data-Driven Tools for Patient Risk Stratification for ARDS Tejas Prahlad, Undergraduate Student	Health
53.	Data and Workflow Management with the signac Framework Carl Simon Adorf, Graduate Student	Data management
54.	Understanding Blight Ticket Compliance in Detroit Allie Cell, Undergraduate Student	Urban Planning
55.	The Michigan Student Artifical Intelligence Lab (MSAIL) Samuel Tenka, Undergraduate Student	Informational