Data Science Program

POSTER SESSION
Unity Hall 400

Group A 12:00pm to 2:00pm
Group B 2:30pm to 4:30pm

#A
Deep Learning Analysis of Neuroimaging (MRI) Data
Luke Czachor
Advisor(s)**:** Erin Solovey, Rodica Neamtu

#A
Deep Learning Analysis of Neuroimaging (MRI) Data
Lily Beals, Amaan Shirwani, Valli Velmurugan
Advisor(s): Benjamin Nephew, Dmitry Korkin, Angela Incollingo Rodriguez

#A
How the Human Brain Makes Sense of Natural Scenes
Todeyon Somasse, Isaac Akande
Advisor(s)**:** Ziming Zhang

#A
Multimodal 3D Modeling
Bryan Dionne, Cam Cadman, Jady Newman
Advisor(s)**:** Ziming Zhang

#A
DraftKings Sports Data Analytics 2025-2026 (full)
Era Kalaja, Duyen Le, Abhiram Yammanuru, Dan Nguyen, Maria Anastasia Masouti
Advisor(s): Donald Brown, Randy Paffenroth
Sponsor(s): DraftKings, (Rani Woerner, Kaci Kus, Frank Williard)

#A
Generating Urban Mobility Data with Diffusion Models
Luz Joseph, Timothy Luc, Nandini Basavaraj, Megan D'Souza
Advisor(s)**:** Yanhua Li

#A
AI Evaluation Pipeline: Benchmarking and Analyzing Large Language Model (LLM) Outputs
Mahit Verma, Tyler Bliss, Neil Iyer-Singh
Advisor(s)**:** Bashima Islam

#A
AI Modeling for Predicting Student Academic Success
Klaudio Fusha, Jason Zhang, Tyler Garofalo, Ajay Bhagavatula
Advisor(s): Elke Rundensteiner
Sponsor(s): Foundation

#A
AI for Impact: Inferring Suicidal Ideation via Smartphones
Jonathan Buwembo, Elizabeth Mastrangelo, Santiago Giraldo Godoy, Eric Li, Jacob Murphy, Mirabelle El Chalfoun
Advisor(s): Elke Rundensteiner
PhD Mentors: Kevin Hickey, Xiaoshuai Li, Avantika Shrestha
Sponsor(s): NIH

#A
InnoSpire Glasses Companion: An AI-Driven Multilingual Assistive Mobile Application for Visually Impaired and Blind Individuals
Zack Gluck, Samruddhi Naik
Advisor(s): Chun-Kit Ngan
Sponsor(s): InnoSpire Technology Limited

#A

DS/CS MQP 2025 ~ 2026: Bonbon MagosMaster Companion: A Multilingual AI Robot Integrated with Mobile Chatbot Capabilities for Enhancing AI Education and Learning Engagement

Ken Sebastian, Ryan Colberg, Pujeet Kapoor
Advisor(s): Chun-Kit Ngan
Sponsor(s): Bonbon Robotics Limited

#A

Scaling Diffusion Models to Large Sparse Graphs

Gia Hien Pham, Weaver Goldman, David Dechantsreiter, Botao Hu
Advisor(s): Oren Mangoubi, Fabricio Murai

#A

AI-Powered Species Identification

Ben Zeng, Connor Jason, Xavier Bonavita, Victor Che, Aishwarya Sinha, Maxwell Hobbs, Alessandra Giovenco, Yi Hong Jiang
Advisor(s): Kyumin Lee
Sponsor(s): National Science Foundation

#A

An Entity is All You Need: A Framework and a Benchmark for Entity Extraction in eDiscovery

Itay Kohen, Artem Frenk, Jacob Wiberg
Advisor(s): Roee Shraga
Sponsor(s): HaystackID

#A

Deep Learning to Predict Staphylococcus epidermidis Biofilm Removal From Corresponding Release Cell Images

Brian Morissette, Cameron Walters, Michael Herchenroder
Advisor(s): Elizabeth Stewart, Randy Paffenroth

#A

Energy-efficient AI models

Antonio Aguiar Hemanth Vadlamani, Ha Chu, Oleg Zabolotnev, Tobias Chin
Advisor(s): Xiangnan Kong

#A

CS: MQP: Dai: Security Concentration Eligible: Profiling Mobile Super App Behavior for Analysis of Security and Vulnerabilities

Grant Kortfelt, Szymon Mamro, Zachary Bastek, Dakota Wellerbrady
Advisor(s): Jun Dai

#B

LEMURS RADAR: Interactive Dashboard for Risk Alerting of College Students

Skyler Dooley, Willem van Oosterum, Jeffrey Li, Nixon Showalter, Daniel Mastrobuono
Advisor(s): Elke Rundensteiner
Sponsor(s): NIH

#B

ESAPT: ERD to SQL Artificial Intelligence Powered Transpiler

Patrick Durgin, John Burke, Daniel Zhang, Phuong Tran, Yara Nabih
Advisor(s): Wilson Wong, Rodica Neamtu

#B

Computational Optimization Frameworks for Personal Task Scheduling

Tora Ito, Teddy Hellgren, Ana Caroline Sakai, Utku Yakar, Victoria Escuer
Advisor(s): Ryan Madan, Andrew Trapp, Ozge Aygul

#B

Create “MyAnalyst” Fidelity’s analytics search engine

Jacob Ruppert, Colin Nguyen, Dan Do, Amir Jarad
Advisor(s): Eugene Okyere-Yeboah, Joshua Cuneo, Daniel Treku
Sponsor(s): Fidelity Technology Group, LLC

#B

Green Future Wealth Management (B) - Detecting ESG Rating Anomalies: A Hybrid Machine Learning Approach

Diwakar Sandhu, Joel Indipiginja, Elias Saunier, Josh Werner
Advisor(s): Xin Gao, Daniel Treku, Eugene Okyere-Yeboah, Shubbhi Taneja
Sponsor(s): Green Future Wealth Management

#B

Automatically Detecting Suboptimal End-User Experiences

Nathan Amend, Tyler Busack, Alex Lap, Benson Lin, Evan Lutz

Advisor(s): Craig Shue, Lane Harrison

#B

Energy Preserving Neural Network for Liquid Crystal Problem

Haoyan Zhong

Advisor(s): Guanying Peng, Zhongqiang Zhang

#B

Rotation Invariance in Generative Point Cloud Models

Roberto Correa

Advisor(s): Ziming Zhang

POSTER SESSION

Unity Hall 500

Group A 12:00pm to 2:00pm

#A

Using Generative AI to Understand Multi-Dimensional Poverty

Esther Mao

Advisor(s): Robert Krueger, Raha Moraffah

Sponsor(s): Development Design Lab

#A

Mind in the Machine: Enabling LLM Agents with Theory of Mind

Noah Newton, Daniel Baranov, Jacob Bergeron, Benjamin Marsh, Eloisa Salcedo-Marx

Advisor(s): Raha Moraffah

#A

Optimal Piano Fingering: Combining Machine Learning, Physiological Constraints, and Optimization

Cody LaBonty, Sean Peacock, Tyler Mcinteer, Griffin Brown

Advisor(s)**:** Jacob Whitehill, Scott Barton

#A

Advanced Fuel Campaign Data Center and AI Implementation at Idaho National Laboratory High Performance Computing

Krish Desai, Jake DePietro, Leala Carbonneau, Arjun Bhat

Advisor(s)**:** Torumoy Ghoshal

Sponsors: Battelle Energy Alliance, LLC;

Origination Sponsor Name: Department of Energy

#A

Earthovia 2.0: Curriculum Building and Auditing Software Technical Report

Ronak Wani, Hemankit Vallurupalli

Advisor(s): Roee Shraga, Matthew Ahrens

#A

TPG MQP: Measuring Simulated AI Literacy

Krishna Garg, Grace Robinson, Shevlin Jaffe, Deepak Dinesh

Advisor(s): Daniel Treku, Eugene Okyere-Yeboah, Wilson Wong, Marcel Blais

Sponsor(s): TPG (Texas Pacific Group)

#A

Terrain Generation via Deep Learning

Elias Montas, Riley Meyers, Joseph Abata

Advisor(s): Ethan Prihar

#A

Dynamical Systems and Deep Learning

Dominic Ranelli, Traver Smith

Advisor(s): Randy Paffenroth

#A

Automated Root Cause Analytics System

Jed Geoghegan, Jaime Ortiz de la Torre Cordova, Shawn Patel, Noah Cyr, Liam Keblin
Advisor(s): Elke Rundensteiner
Sponsor(s): Microsoft Corporation

#A

CS: MQP: Designing Interactive Experiences and Visualizations Promoting Data Literacy (CPCN) 25-26

Ivan Zheng, Ethan Shanbaum, Rohit Tallapragada, Hien Hoang
Advisor(s): Lane Harrison

#A

Accelerating Radiative Transfer Through AI

Srisaranya Pujari
Advisor(s): Fatemeh Emdad, Rudra Kafle

#A

CS: MQP: Mapping Global China: Visualization Design and Development (SCNE) 25-26

Alexander Shettler, Joe Molder, Oluwapelumi Akingbile, Jiahui Lin
Advisor(s): Jennifer Rudolph, Lane Harrison

#A

Mapping Global China: Financial Data Integration and Visualization

Connor Bouffard, Brian Jin, William Balduf, Wentao Yu
Advisor(s): Jennifer Rudolph, Diane Strong, Lane Harrison

#A

Pawsthetics

Kylie McDonagh, Jonathan King, Emily Booker, Kai Yawata
Advisor(s): Kristen Billiar, Vincent Aloi, Daniel Treku, Shijie Zhou

#A

A Neural Network Emulator for Agent-Based Malaria Models: Extracting and Selecting Key Predictors for Malaria Incidence Over Time

Floris Huiskers, Aidan Henbest
Advisor(s): Stephan Sturm, Charlotte Fowler
Sponsor(s): Swiss TPH

#A

CS: MQP: Designing Interactive Experiences and Visualizations Promoting Data Literacy (MCHA) 25-26

Anthony Coutts, Colin Hoar, Peter Czepiel, Timothy Hutzley
Advisor(s): Lane Harrison, Stacy Shaw

#A

Drone-Borne GPR Farm Measurements and ML Model Creation for Soil Subsurface Characterization

Vincent Huang, Ethan Henry
Advisor(s): Seyed Zekavat
Sponsor(s): USDA

#A

Process Improvement at ProAmpac Westfield, Ma.

Jackson Ling, Brandon Engerman, Daniel Shanley, Nikolas Smith, Will Zawada, Ryan Gentilucci, Kelvin Feliz
Advisor(s): Walter Towner, Sharon Johnson
Sponsor(s): ProAmpac Westfield, Massachusetts