

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 Kohan, Artem Frenk, Jacob Wiberg

Advisor(s): Roei 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): Roe 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 Aloï, 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