

Data Science

POSTER SESSION, 1:00pm to 3:00pm

Location: Unity Hall 500

Advancing Diffusion Models for Human Activity Recognition

Cindy Trac
Dillon McCarthy
Sirut Buasai
Jason Dykstra
Advisor: Elke Rundensteiner

Understanding player movement in the NFL, from Scouting Combine to games

Matthew Dzwil
Mia Hopman
Katie Housekeeper
Advisors: Yanhua Li and Kenny Ching

USDA Foodborne Illness Outbreak Detection and Visualizations

Katy Hartmann
Timothy Kwan
Jasmine Laber
Anne Lapsley
Liam Rathke
Advisors: Elke Rundensteiner and Oren Mangoubi

Data-Driven Computational Approaches in Pain Medicine

Lauren Flanagan
Smera Gora
Aidan Burns
Advisors: Carolina Ruiz, Benjamin Nephew, and Lisa Conboy

Developing a Wildlife Crime Media Aggregator

Julie Andrade
Michael Geary
Bao Huynh
Advisors: Kyumin Lee, Renata Konrad, and Oren Mangoubi

Efficiency Analysis of Partner Organizations: Poverty Stoplight

Hayden Smith
Rebecca Noris
Catherine Salvaggio
Kayla Brown
Advisors: Andrew Trapp, Daniel Reichman, and Ryan Madan

Interpretability of Deep Neural Networks for Pre-Symptomatic Pathogen Exposure Detection

Maceo Richards
Advisors: Xiaozhong Liu and George Heineman

Clinical Trial Prediction

Calvin Rambacher
Advisors: Xiaozhong Liu and Fabricio Murai

Analysis of Stigma Towards the Mental Health Discussion on Social Media

Mark Buono
Rachelle Gonzales
Jada Hinds-Williams
Josephine Kim
Advisors: Adrienne Hall-Phillips, Nima Kordzadeh, and Jeanine Skorinko

Fidelity: AI Based Anomaly Detection

Aruzhan Koshkarova
Nathan Kumar
Mitchell Sirois
Austin Zhou
Advisors: Marcel Y. Blais, Robert Sarnie, and Wilson Wong
Sponsor: Fidelity LLC

Development of Predictive and Prescriptive Analytical Models Using Customer Revenue and Usage Data

William Bazakas-Chamberlain
Abigael Kihu
Michael O'Connor
Shiyu Wu
Advisors: Marcel Y. Blais, Robert Sarnie, and Wilson Wong
Sponsor: SaaSWorks

Worcester IS FAB Lab MQP on Blockchain and Machine Learning

Qingbei Shang

Joshua Debare

Kelsey Moody

Mabel Konadu

Cameron Morreale

Advisors: Marcel Y. Blais, Robert Sarnie, and

Wilson Wong

Sponsor: Worcester IS FAB Lab

Analyzing Housing Market Trends with Data and External Factors

Alex Bolduc

Reagan Brunelle

Aleksander Proko

Yueting Zhu

Advisor: Marcel Y. Blais, Robert Sarnie, Wilson

Wong, and Michael Elmes

Sponsors: New York City-based Alternative Investment Firm

Risk Indifference Pricing of American Put Options: Deep Learning for Reflected Backwards Stochastic Differential Equations

Fredrick "Forrest" Miller

Advisor: Stephan Sturm

Answering Unique Questions Pertaining to the COVID-19 Pandemic

Steven Tran

Tia Mehta

Dylan Shanes

Advisor: Torumoy Ghoshal

Machine Learning with User-Friendly Data Generation for Computer Vision-Based Navigation

Amos Roche

Ryan Firenze

Margaret Munroe

Sebastian Pineda

Arman Saduakas

Advisor: Oren Mangoubi

A Visual-Based Educational Support Platform for Teaching and Learning Neural Network-Based NLP Analytics

Garrett McMerriman

Daniel Johnson

Jack Gomes

Henry Yoder

John Prominski

Advisor: Chun-Kit Ngan

A BERTopic Platform for Perceiving Patients' Views of Cancer Immunotherapy on Social Media and Online Forums

Mago Sheehy

Sierra Mangini

Florkenthia Jolibois

Tiffany Wee Sit

Sidney Goldinger

Advisor: Chun-Kit Ngan

Multi-Class Classification of Bets and Parlays for DraftKings Sportsbook

Grace Casey

Ryan Dieselman

Jack Fredo

Jackson Lombardi

Cameron Tomko

Advisor: Rick Brown

Understanding and Optimizing Mistake Messages in Mathematics

Siddhartha Pradhan

Chayanne Sandoval-Williams

Shannen Lin

Advisor: Neil Heffernan and Stacy Shaw