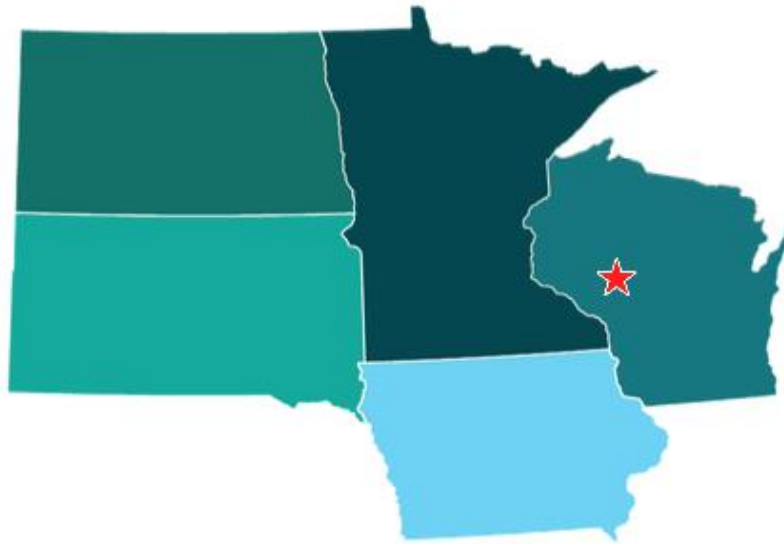


# MICS 2026 Program

## University of Wisconsin - Eau Claire



Registration from 1200 to 1530

Welcome and Announcements

Woodland Theater in Davies Center

1340 – 1350

MICS 2026 WiFi

SSID: UWECguest or SSID: eduroam

## Technical Session 1: 1400 – 1500 Friday March 27<sup>th</sup>

Davies 320 A&B	IoT	Chair: Naeem Seliya
	Evaluating Intrusion Detection Systems Across Class Imbalance, Performance, and Explainability Using Large-Scale IoT Network Data	Jacob Diamond, James Francis McCormack and Naeem Seliya
	Design and Implementation of a Lightweight Integrity and Authentication Protocol for IoT-Based Healthcare Applications Using Wireless Body Area Network	Stephen Asamoah Adusei

Davies 311		Chair: Rushit Dave
	Evaluating Generalization in Deepfake Detection Architectures Beyond Benchmark Accuracy	Rushit Dave, Eliana Assefa, Fenet Getachew and Mansi Bahvsar
	The Human Signature: Facial and Behavioral Biometrics in Cyber Security	Rushit Dave, Aman Bista and Mansi Bhavsar

Davies 320 F	AI Applications	Chair: Xiang Ma
	Soils and the Life Cycles of Amazon Farms: Object-Based Tracking of Growth, Transition, and Persistence	Brett Storoe, Tyge Plater and Michael Link
	Proactive Urban Forestry Management: A Machine Learning Approach to Predicting and Prioritizing Tree Pruning in Milwaukee	Joshua Myers, Eddy Chukwuma-Ugwu and Xander Ede

Davies 330 A		Chair:
-----------------	--	--------

	Evaluation of Transformer and CNN Architectures for 3D Aneurysm Detection	Evan Schubert, Cade Rousseau, Venkata Karri and Nikolas Palacios
	HySSS-Mamba	Peter Kwaterski, Austin Koske, Miles Trompeter, Isabella Ruiz, Vlad Wilson, Audrey Chapman and Caleb Gray

Davies 330 B		Chair:
	Real-Time Object Detection Navigation Assistance System	Vincent Elouie, Max Forst, Kevin McGrath, Jack Schaefer and Ediz Polat
	From Revit to Robot: BIM-Driven Simulation for Autonomous Building Operations	Adrian Manchado, Tanner Cellio, Owen Pacetti, Diego Gonzalo, Joseph Loduca, Delsoro Some, Nicolas Picha and Steven Thomas

## Technical Session 2: 1530 – 1630 Friday March 27<sup>th</sup>

Davies 320 A&B	Learning Experiences	Chair: Emily M. Hastings
	An E-Textiles Workshop for Undergraduate Learning	Ethan R. Behrendt, Hunter M. McDaniel and Emily M. Hastings
	15 years of Sorting Competitions	Elena Machkasova

Davies 311	AI Robotics	Chair: Rushit Dave
	Machine Learning in Autonomous Vehicles: Progress, Datasets, and Barriers	Rushit Dave, Betlehem Gebremeskel and Mansi Bhavsar

	to Achieving SAE Level 5 Full Autonomy	
	Applications of Multi-Agent Communication with Reinforcement Learning in Competitive Robotics	Andrew Needham, Charles Malohn, Corbin Schaffer, Jacob Newberry, Paxson Gottschalk and Leigh Goetsch

Davies 320 F		Chair:
	Multimodal Image Colorization: Text- Conditioned Guidance for Grayscale-to- Color Translation	Colten Reissmann and Hugo Garrido-Lestache Belinchon
	Surrogate Optimization for Direct Feature Selection	Dylan Norquist, Aiden Telgenhof, Evan Roegner and Jeremy Kedziora

Davies 330 A		Chair:
	Parkinsons Disease Detection using Bioimpedance Analysis and Evaluation	Jaren Sandbeck and Ediz Polat
	Fun With Fundoscopy: Accessible Screening for Diabetic Retinopathy	Will Sebelik-Lassiter, Sydney Hengehold, Faith Papazoglou, Joseph Pearson and Ahmed Sayed

Davies 330 B		Chair:
	Modeling the Long-Term Spread of Chronic Wasting Disease in Iowa Whitetail Deer Using Agent-Based Simulation	Adam Brustkern, Aidan Jones, David Lochner and Eric Schmitt

	Quant Convergence: Bridging Classical Value Investing and Modern Factor Models for Systematic Equity Selection	Augusto Yamazaki and Hugo Garrido-Lestache
--	--	--

### Technical Session 3: 0900 – 1000 Saturday March 28<sup>th</sup>

Davies 320 A&B	AI in Education	Chair: Jeremy Straub
	The Impact of AI Vibe Coding on Computer Science Education	Jeremy Straub
	How ChatGPT Can Be Used to Assist Student Learning	Benjamin Savatski and Allison Sauppé

Davies 311		Chair:
	Evasion Attacks: How Adversarial Noise Bypasses ML Classifiers	Muhammad Abusager, Parker Hummel and Ryne Skabo
	PULSAR: Dynamic Time-Slice Scaling Vis Q-Learning for Mixed Workload Embedded RTOS	Braden Everson and James Lembke

Davies 320 F		Chair: Ronni Kurtzhals
	Analyzing How Increased Code Complexity Affects Maintainability and Development in a Revamped, High-Turnover Software Project	Ian King and Anne Denton
	Implementing Standards-Based Grading Across Multiple Computer Science Courses: An Experience Report	Ronni Kurtzhals

Davies 330 A		Chair:
	Utilizing Convolutional Neural Networks for Decoding 8-FSK Digital Radio Communications	Daniel Portwine, Peli Orugbani, Brett Servais and John Weinrich

	Consequentialism: Counterfactual Sampling to Speed Learning	Adrian Manchado and Jeremy Kedziora
--	---	-------------------------------------

Davies 330 B		Chair:
	Structured Source Reliability Modeling for Retrieval-Augmented Systems	Yuktha Tata Koganti, Hugo Garrido-Lestache Belinchon and Yuktha Tata Koganti
	EHRSQL: Text to SQL reliable modeling	Hardeep Kaur Dhalla

## Technical Session 4: 1030 – 1130 Saturday March 28<sup>th</sup>

Davies 320 A&B		Chair: Muhammad Abusaqer
	Empirical Evaluation of Data Poisoning Attacks and Practical Defenses in Supervised Learning	Muhammad Abusaqer, Toshif Khan and David Alonso
	Empirical Evaluation of Membership Inference Attacks on NLP Text Classifiers: A Baseline Study on SST-2	Muhammad Abusaqer and William Novak

Davies 311		Chair:
	SkyNet: Belief-Aware Planning in Partially Observable Stochastic Games	Adam Haile
	From 4,608 to 37: Scaling Reinforcement Learning Action Spaces in Minecraft PVP	Xander Ede

Davies 320 F		Chair: Kent Lee
	An Open-Source, Distributed, Parallel Programming Environment: Dragon	Kent Lee
	Experimenting with Locally Housed Large Language Models	Cheryn Lindsay, Temiloluwa Afolabi and Ahmed Kamel

Davies 330 A		Chair:
	The Effect of Text Chunk Size on Retrieval-Augmented Generation Performance	German Garrido-Lestache Belinchon and Hugo Garrido-Lestache Belinchon
	SMEARGLE	Dylan Norquist

Davies 330 B		Chair: Benjamin Fine
	Scribby: A Multi-Level LLM Framework for Semantic Video Analysis	Julian Abelarde, Hugo Garrido-Lestache Belinchon and Julian Abelarde
	Code as Images: Investigating Visual Representation Strategies for Repository-Scale Code Reasoning	Grant Glorioso