Tuesday, December 2 - Early Registration (5:00pm - 7:00pm)

Wednesday, December 3 - Day 1

7:00	**Registration (till 5:00pm)**		
7:30	**Continental Breakfast**		
8:00	**Welcoming and Openning Remarks by Taghi Khoshgoftaar, Florida Atlantic University, Conference Chair** **Welcoming Remarks by Dean Stella Batalama, COE&CS at FAU, Introducing Keynote Speaker** **Room : Grand OASIS Ballroom**		
8:15	**Keynote Speaker : Michael Koeris** **DARPA Biological Technologies** **Room : Grand OASIS Ballroom**		
9:15	**Coffee Break**		
	ROYAL PALM 1	**ROYAL PALM 2**	**ROYAL PALM 3**
	11A: Multi-Agent Systems & Reinforcement Learning **Chair: Fernando Koch** **Room: Royal Palm 1**	**11B: LLMs for Text/Code & RAG** **Chair: Sarah Tasneem** **Room: Royal Palm 2**	**11C: -** **Room: -**
9:30	**123 - Multi-Agent Behavior Cloning for Modeling Realistic Adversaries in Air Combat Simulations** *(Andreas Strand (FFI)*; Karsten Brathen (FFI); Martin Asprusten (FFI); +1 more)*	**118 - Progressive searching for Retrieval in RAG** *(Taehee Jeong (San Jose State University)*; Xingzhe Zhao (San Jose State University); Peizu Li (San Jose State University); +2 more)*	
9:50	**130 - QMIX-Based Multi-Agent Reinforcement Learning for Coordinated Tourist Recommendation with Crowd Management** (*Brinda Leaticia Kuiche SOP(College of Management Science, Chengdu University of Technology); Luo (corresponding author) Yuyan (College of Management Science, Chengdu University of Technology); Victor Kombou (University of Electronic Science and Technology of China)*; +1 more)*	**388 - Attr-RAG: Attribution-Guided Retrieval-Augmented Generation for Scientific Experiment Design** *(Fazle Rahat (University of Central Florida)*; M Shifat Hossain (University of Central Florida); Arvind Ramanathan (Argonne National Laboratory); +3 more)*	
10:10	**416 - SLA-MORL: SLA-Aware Multi-Objective Reinforcement Learning for HPC Resource Optimization** *(Seraj Mostafa (University of Maryland, Baltimore County)*; Aravind Mohan (McMurry University); Jianwu Wang (University of Maryland, Baltimore County)*	**391 - Solving Math Word Problems Using Estimation Verification and Equation Generation** *(Mitchell Piehl (University of Colorado, Colorado Springs); Dillon Wilson (University of Colorado, Colorado Springs); Ananya Kalita (University of Colorado, Colorado Springs); +1 more)*	
10:30	**445 - BoP-X: A New XAI Approach to Explain Reinforcement Learning for Autonomous Driving** *(Gulsum Alicioglu (Rowan University)*; Bo Sun (Rowan University))*	**534 - Efficient Visual Cyberbullying Detection via Knowledge Distillation from EfficientNet to Lightweight CNNs** *(Pal Dave (North Carolina A&T State University)*; Subhram Dasgupta (North Carolina A&T state University); Kushal Badal (North Carolina A&T State University); +2 more)*	
10:50	**Coffee Break**		
	12A: Robustness, Faults & Theory **Chair: Hamid Usefi** **Room: Royal Palm 1**	**12B: Federated & Distributed Learning** **Chair: Fernando Koch** **Room: Royal Palm 2**	**12C: Social Media & Discourse Analysis** **Chair: Mary Walauskis** **Room: Royal Palm 3**
11:10	**92 - Fault Robustness and Lightweight Error Correction for Low-Precision Posit Neural Networks in Safety-Critical Systems** *(Suleiman Sadiq (University of Reading)*; Martin Lester (University of Reading))*	**121 - Information-Geometric Barycenters for Bayesian Federated Learning** *(Nour Jamoussi(EURECOM)*; Giuseppe Serra (EURECOM); Photios A.Stavrou(EURECOM); +1 more)*	**148 - Scientific Crosstalk: Analyzing Sentiment-Topic Alignment in Personal and Scientific Discourse** *(Praveshika Bhandari (University of Arkansas at Little Rock); Connor Young (University of Arkansas at Little Rock); Jan Springer (University of*
11:30	**125 - Out-of-the-Box Uncertainty: Reducing Confidence Errors with Dirichlet Classifiers** *(Courtney Franzen (University of Colorado Denver)*; Farhad Pourkamali (University of Colorado Denver))*	**241 - A Generative Adversarial based Approach for Continual Federated Learning with Non-IID Data** *(Akshat Sharma (University of Regina)*; JingTao Yao (University of Regina))*	**191 - Mental Multi-class Classification on Social Media: Benchmarking Transformer Architectures against LSTM Models** *(Khalid Hasan (Missouri State University); Jamil Saquer (Missouri State University)*; Yifan Zhang (Missouri State University)*
11:50	**294 - Topology of Out-of-Distribution Examples in Deep Neural Networks** *(Esha Datta (Sandia National Laboratories)*; Johanna Hennig (Sandia National Laboratories); Eva Domschot (Sandia National Laboratories); +2 more)*	**336 - Privacy-Preserving Model Compression: Adaptive Pruning for Federated Split Learning of LLMs** *(Dinesh Chowdary Attota (Kennesaw State University)*; Linh Le (Kennesaw State University); Ying Xie (Kennesaw State University))*	**243 - Decoding Social Media Sentiment Before Events Occur Through Sentence-Level Embeddings and Graph Learning** *(Jovan Andjelkovic (Temple University)*; Shelly Gupta (Temple University); Abdulrahman Alharbi (Temple University); +1 more)*
12:10	**339 - Evaluating the Impact of Compression Techniques on the Robustness of CNNs under Natural Corruptions** *(Italo Silva (Federal University of Alagoas)*; Emanuel Pereira (Federal University of Rio Grande do Norte); Erick Barboza (Federal University of Alagoas); +2 more)*	**404 - MADE-PI: Framework for Effective Anomaly Detection in Federated Learning Applications** *(Raman Zatsarenko (Rochester Institute of Technology); Sergei Chuprov (University of Texas Rio Grande Valley)*; Dmitrii Korobeinikov (Rochester Institute of Technology); +2 more)*	**246 - Troll Detection in Reddit Using Combined Machine Learning classifiers, Deep Learning, and Human-in-the-Loop Analysis** *(Rafeef Baamer (George Mason University)*; Mihai Boicu (George Mason University))*
12:30	**Lunch** **Room : Grand OASIS Ballroom**		
	13A: Core Learning & Generalization **Chair: Yanzhao Wu** **Room: Royal Palm 1**	**13B: Model Efficiency & Pruning** **Chair: Joel Brynielsson** **Room: Royal Palm 2**	**13C: Tutorial 1: Generative Intelligence and Large Language Models** **Room: Royal Palm 3**
13:50	**116 - Learning Robust Simplex Sparse Representation Using Alternating Linearized Minimization Method** *(Zhennan Shi (Colorado School of Mines)*; Qiushi Wei Zhennan Shi (Colorado School of Mines))*	**146 - CAMP-HiVe: Cyclic Pair Merging based Efficient DNN Pruning with Hessian-Vector Approximation for Resource-Constrained Systems** *(Mohammad Helal Uddin (University of Louisville)*; Sai Krishna Ghanta (University of Georgia); Liam Seymour (University of Louisville); +1 more)*	**Generative Intelligence and Large Language Models** ***Fernando Koch*** ***Florida Atlantic University***
14:10	**160 - Feature Orthogonalization via Contrastive Upper-bound Separation for Domain Generalization** *(Noaman Mehmood (University of Delaware)*; Kenneth Barner (University of Delaware))*	**196 - MIGRANT-DE: Scalable Differential Evolution for Large-Scale Machine-Learning Optimization** *(Priyanka Haresh Bhatia (Meta)**	
14:30	**407 - AI-Driven Test Generation from Natural Language: A Gamified Framework for Automated UI Testing** *(Maroun Ayli (Saint Joseph University of Beirut)*; Youssef Bakouny (Saint Joseph University of Beirut); Nader Jalloul (Murex); +2 more)*	**309 - Localized LoRA: A Structured Low-Rank Approximation for Efficient Fine-Tuning** *(Babak Barazandeh (USC)*; Subho Majumdar (University of Minnesota); Om Rajyaguru (North Carolina State University); +1 more)*	
14:50	**444 - From Answer to Origin: Page Number Grounding in Document-Level Question Answering** (Zarin Shejuti (Winston-Salem State University)*; Debzani Deb (Winston-Salem State University); Emily Dunkel (Jet Propulsion Laboratory))	**337 - Learning a Single Compact Soft Tree with Iterative Updates of Sample Weights** *(Atsuya Saiga (Kwansei Gakuin University)*; Akihiro Inokuchi (Kwansei Gakuin University))*	
15:10	**Coffe Break**		
	14A: Offline RL & Policy Optimization **Chair: Sunny Raj** **Room: Royal Palm 1**	**14B: Vision Systems & 3D Reconstruction** **Chair: Farhan Rahman Arnob** **Room: Royal Palm 2**	**14C: Feature Engineering** **Chair: Olaoluwa Adigun** **Room: Royal Palm 3**
15:30	**149 - Attention-Based Offline Reinforcement Learning and Clustering for Interpretable Sepsis Treatment** *(Punit Kumar (University at Buffalo)*; Vaibhav Saran (University at Buffalo); Divyesh Patel (University at Buffalo); +2 more)*	**139 - Leveraging Anatomical Guidance: A Novel Attention Mechanism for Pedestrian Detection** *(Hongbo Pang (Carleton University)*; ChangCheng Huang (Carleton University))*	**186 - Automated Feature Engineering for Contextual Bandits via AATention Transfer Learning** *(Ethan Pedersen (Brigham Young University)*; Jacob Crandall (Brigham Young University)*
15:50	**244 - Sparse RNNs in Reinforcement Learning Applications** *(Quincy Hershey (Worcester Polytechnic Institute)*; Randy Paffenroth (Worcester Polytechnic Institute)*	**155 - Object Identification Under Known Dynamics: A PIRNN Approach for UAV Classification** *(Nyi Nyi Aung (Louisiana State University); Neil Muralles (Louisiana State University); Adrian Stein (Louisiana State University)*)*	**514 - Generalizing Distributions of Error and Bias in Regression Modeling with Res-Unets** *(Zackary Hoyt (University of Oklahoma)*; Dean Hougen (University of Oklahoma))*
16:10	**274 - Diffusion Policies with Offline and Inverse Reinforcement Learning for Promoting Physical Activity in Older Adults Using Wearable Sensors** *(Chang Liu (University of Central Florida); Ladda Thiamwong (University of Central Florida); Yanjie Fu (Arizona State University); +1 more)*	**325 - Rig-Aware 3D Reconstruction of Vehicle Undercarriages using Gaussian Splatting** *(Nitin Kulkarni (University at Buffalo)*; Akhil Devarashetti (ACV Auctions); Charlie Cluss (ACV Auctions); +5 more)*	**551 - Feature Selection via Class-wise Mean Deviation** *(Abu Fuad Ahmad (New Mexico State University)*)*
16:30	**354 - Reinforcement Learning and 3D Chirogram Representation for Blind Source Separation** *(Bingcheng Li (Lockheed Martin)*)*	**414 - Street2Air: A Framework for Synthesizing Aerial Vehicle Views from Ground Images** *(Md Rubel Ahmed (Louisiana Tech University)*; Fazle Rahat (University of Central Florida); M Shifat Hossain (University of Central Florida); +2 more)*	**399 - Unsupervised Feature Extraction using Convolutional Autoencoder for Credit Card Fraud Detection** *(Zahra Salekshahrezaee (Florida Atlantic University); Mary Anne Walauskis (Florida Atlantic University); Taghi Khoshgoftaar (Florida Atlantic University)*)*
16:50	**Break**		
17:00	**Poster Sessions 1 - 2 and Reception** **Room : Grand OASIS Ballroom**		
20:00	**End of the day**		

Thursday, December 4 - Day 2

	ROYAL PALM 1	ROYAL PALM 2	ROYAL PALM 3
7:30	**Registration (till 5:00pm) and Continental Breakfast**		
8:00	**Daily Remarks** **Room : Grand OASIS Ballroom**		
8:15	**Keynote Speaker : Nikolaos Bourbakis** **Wright State University** **Machine Learning and People with Special Needs** **Room : Grand OASIS Ballroom**		
9:15	**Coffee Break**		
	21A: Medical Image Segmentation **Chair: Sunny Raj** **Room: Royal Palm 1**	**21B: Health Diagnostics & Prediction** **Chair: Yanzhao Wu** **Room: Royal Palm 2**	**21C: Tutorial 2 : Rethinking Deep Learning Interpretability and Adaptivity** **Room: Royal Palm 3**
9:30	**212 - Accurate Polyp Sizing via Attention-Guided Parallel CNN-ViT Depth and Learned Scale** *(Alimire Nabijiang (University of Massachusetts Lowell)*; Feng Liu (Department of Gastroenterology,Shanghai Tenth People's Hospital,Tongji University School of Medicine); Jiao Feng (Department of Gastroenterology,Shanghai Tenth People's Hospital,Tongji University School of Medicine); +3 more)*	**287 - NORA: A Nephrology-Oriented Representation Learning Approach Towards Chronic Kidney Disease Classification** *(Mohammed Abdul Hafeez Khan (Florida Institute of Technology)*; Twisha Bhattacharyya (Edgewood Jr./Sr. High School); Omar Khan (University of California Riverside); +4 more)*	**Rethinking Deep Learning Interpretability and Adaptivity** ***Plamen Angelov, Bernard Tomczyk and Agil Aghsanli*** ***Lancaster University***
9:50	**250 - SAM2LoRA: Composite Loss-Guided, Parameter-Efficient Finetuning of SAM2 for Retinal Fundus Segmentation** *(Sayan Mandal (AMD)*; Divyadarshini Karthikeyan (Amazon); Manas Paldhe (Infinitus Systems))*	**348 - GUI-Based Deep Learning System for Real-Time Early Dental Caries Classification and Detection via OCT Images** *(Carlos Diaz (California State University, Chico)*; Hassan S. Salehi (California State University, Chico)*	
10:10	**300 - A Multi-Stage Machine Learning Pipeline for Automated Bowel Preparation Scale Assessment in Colonoscopy Videos** *(Yiqin He (University of Massachusetts Lowell)*; Qilei Chen (University of Massachusetts Lowell); Ke Wan (University of California San Diego); +3 more)*	**451 - Medical Imaging with Deep Learning: A Comparison of CNN and Transformer Models** *(Kehan Gao (Eastern Connecticut State University)*; Sarah Tasneem (Eastern Connecticut State University); Taghi Khoshgoftaar (Florida Atlantic University))*	
10:30	**535 - RespFormer: A Motion-Guided Temporal-Frequency Multimodal Fusion Transformer for Contactless Respiratory Monitoring** *(Shadman Sakib (University of Maryland Baltimore County)*; Gaurav Shinde (University of Maryland Baltimore County); Snehalraj Chugh (University of Maryland Baltimore County); +2 more)*	**473 - EDLAD: Ensemble Deep Learning for Alzheimer's Disease Detection using Brain EEG Signals** *(Thi Thuy An Phan (Florida Atlantic University)*; Xingquan Zhu (Florida Atlantic University))*	
10:50	**Coffe Break**		
	22A: General Vision & Retrieval **Chair: Mary Walauskis** **Room: Royal Palm 1**	**22B: Time Series** **Chair: Kehan Gao** **Room: Royal Palm 2**	**22C: LLM Application & Systems** **Chair: Joffrey Leevy** **Room: Royal Palm 3**
11:10	**224 - SkewFuse: Unsupervised Confidence-Guided Rank Fusion for Multi-View Image Retrieval** *(Enis Teper (Istanbul Technical University)*; Mustafa Keskin (Hepsiburada); Emre Rencberoglu (Hepsiburada); +1 more)*	**255 - Heterogeneous Time Series Anomaly Detection in Cyber-Physical Systems with VAEM-LSTMs** *(Lekha Patel (Sandia National Laboratories)*; Shamina Hossain-McKenzie (Sandia National Laboratories))*	**133 - PEPS: Quantum-Inspired Reinforcement Learning for Coherent Reasoning Traces in LLMs** *(Venkata Siva Kumar Margapuri (Villanova University)*; Garik Kazanjian (Villanova University); Naren Kosaraju (Villanova University))*
11:30	**286 - Enhancing Authorship Attribution with Synthetic Paintings** *(Clarissa Loures (Federal University of Minas Gerais)*; Caio Hosken Machado Reis (Kunumi); Luan Alves Oliveira (Kunumi); +2 more)*	**357 - Adaptive von Mises–Fisher Likelihood Loss for Supervised Deep Time Series Hashing** *(Juan Perez (The University of Texas Rio Grande Valley)*; Kevin Garcia (The University of Texas Rio Grande Valley); Brooklyn Berry (The University of Texas Rio Grande Valley); +2 more)*	**183 - Optical Character Recognition for Pre-Digital Historical Documents using Large Language Models** *(Chreston Miller (Virginia Tech)*; Bipasha Banerjee (Virginia Tech))*
11:50	**417 - Fusing Camera and Electromyography Data for Enhanced Range of Motion Assessment** *(Xuke Yan (Oakland University)*; Bo Liu (Massey University); Jinzhao He (University Hill Secondary School); +1 more)*	**485 - Dynamic Time Warping-Based Evidential Clustering of Time Series with c-Medoids** *(Ahmed Samet (INSA Strasbourg), Eya Laffet (ESEN), Mohamed Anis Bach Tobji (ESEN, Univ. Manouba)**	**457 - Trust-Aware Human-AI Teaming Framework for Fake News Detection Using LLMs** *(Abdul Muntakim (Kennesaw State University)*; Sai Sanjay Potluri (Kennesaw State University); Abdullah Al Hafiz Khan (Kennesaw State University); +1 more)*
12:10	**525 - Spectral and Spatial Graph Learning for Multispectral Solar Image Compression** *(Prasiddha Siwakoti (West Virginia University)*; Atefeh Khoshkhahtinat (West Virginia University); Piyush M. Mehta (West Virginia University); +3 more)*	**564 - Gradient-based Model Shortcut Detection for Time Series Classification** *(Salomon Ibarra (University of Texas Rio Grande Valley)*; Frida Cantu (University of Texas Rio Grande Valley); Kaixiong Zhou (North Carolina State University); +1 more)*	**532 - MARVEL: Multi-modal Analysis and Reasoning for Violence Explanation with Large Language Models** *(Kushal Badal* (North Carolina Agricultural and Technical State University)*; Xiaohong Yuan (North Carolina Agricultural and Technical State University); Subhram Dasgupta (North Carolina Agricultural and Technical State University); +2 more)
12:30	**Lunch** **Room : Grand OASIS Ballroom**		
	23A: Vision Systems & Artifacts **Chair: Hamid Usefi** **Room: Royal Palm 1**	**23B: Applied Forecasting & Environmental ML** **Chair: Sarah Tasneem** **Room: Royal Palm 2**	**23C: Security, Systems & Trust** **Chair: Joffrey Leevy** **Room: Royal Palm 3**
13:50	**469 - Adaptive Quantile Guidance in Diffusion Models: Multi-Dataset Learning for Pandemic Time Series** *(Jane Odum (University of Georgia)*; John Miller (University of Georgia))*	**135 - Enhancing Heavy Rain Nowcasting with Multimodal Data: Integrating Radar and Satellite Observations** *(Rama Kassoumeh (Bochumer Institut für Technologie gGmbH)*; David Rugamer (LMU Munchen); Henning Oppel (Okeanos Smart Data Solutions GmbH))*	**197 - BEACON: Behavioral Malware Classification with Large Language Model Embeddings and Deep Learning** *(Wadduwage Shanika Perera (Sam Houston State University); Haodi Jiang (Sam Houston State University)*)*
14:10	**538 - A Semi-Automated Pipeline for Generating and Annotating Colorectal Polyp Data for Semantic Segmentation Tasks** *(Andre Castro (Institute of Informatics, Federal University of Goias)*; Alexandre Naves (Electrical, Mechanical and Computer Engineering, Federal University of Goias); Lucas Neves (Electrical, Mechanical and Computer Engineering, Federal University of Goias); +4 more)*	**440 - Predicting Wildfire Spread with Attention U-Net A Multi-Feature Geospatial Deep Learning Approach** *(Khalil Almakrami (Towson University)*; Rose Atuah (Towson University); Michael P. McGuire (Towson University)*	**474 - Applying Machine Learning to Classify Automobile Repossession Success** *(Preston Billion Polak (Florida Atlantic University); Andy Sinclair (Florida Atlantic University); Taghi Khoshgoftaar (Florida Atlantic University)*)*
14:30	**541 - Single-Step Reconstruction-Free Anomaly Detection and Segmentation via Diffusion Models** *(Mehrdad Moradi (Georgia Institute of Technology)*; Kamran Paynabar (Georgia Institute of Technology); Bianca Maria Colosimo (Polytechnic University of Milan); +1 more*	**544 - Deep Meta-Learning of Temporal Dynamics for Enhanced Salesforce Opportunity Forecasting** *(Sharan Sukesh (CG infinity)*)*	**546 - Active Authentication via Korean Keystrokes Under Varying LLM Assistance and Cognitive Contexts** *(Dong Roh (Bucknell University); Rajesh Kumar (Bucknell University)*)*
14:50	**543 - Adaptive Kernel Selection: Performance Pattern Analysis Across Network Depth Hierarchies and Dataset Complexities** *(Areen Patil (University of Maryland); Rehaan Kadhar (UC Berkeley)*)*	**372 - Highly Imbalanced Regression with Tabular Data in SEP and Other Applications** *(Josias Moukpe (Florida Institute of Technology)*; Philip Chan (Florida Institute of Technology); Ming Zhang (Florida Institute of Technology))*	**537 - Comparative Analysis of Defense Approaches against Adversarial Attacks on Remote Sensing Applications** *(Sanjaykrishnan Ravikumar (Kennesaw State University)*; Ravi Rogannagari (Kennesaw State University); Md Jahirul Islam (Kennesaw State University); +1 more)*
15:10	**Coffe Break**		
	24A: Remaining Vision Topics **Chair: Sayan Mandal** **Room: Royal Palm 1**	**24B: Remaining Health & Activity Topics** **Chair: Joel Brynielsson** **Room: Royal Palm 2**	**24C :Remaining LLM & Social Topics** **Chair: Olaoluwa Adigun** **Room: Royal Palm 3**
15:30	**302 - Reconstruction-Free Classification for Lensless Imaging Systems** *(Pramil Paudel (University of Kansas); Fengjun Li (University of Kansas)*)*	**167 - VaCDA: Variational Contrastive Alignment-based Scalable Human Activity Recognition** *(Soham Khisa (University of Maryland)*; Avijoy Chakma (Bowie State University))*	**202 - A Feature-based Linguistic and Statistical Framework for AI-Generated Text Detection** *(Vaishnavi Sen (California State University, Northridge); Rashida Hasan (California State University, Northridge)*)*
15:50	**310 - Uncertainty-Guided Learning for Semantic Segmentation in CT using Noisy Pseudo Labels** *(Austin Yunker (Argonne National Laboratory)*; Peter Kenesei (Argonne National Laboratory); Hemant Sharma (Argonne National Laboratory); +3 more)*	**172 - State of Health estimation of Li-ion cells via internal degradation modes identification and physics-informed machine learning** *(Quentin Bigouraux (CEA)*; Vincent Heiries (CEA); Saifeddine Aloui (CEA); +2 more)*	**480 - Labeling an Arabic Sockpuppet Dataset Using a Human-in-the-Loop Approach – Short Paper** *(Rafeef Baamer (George Mason University)*; Mihai Boicu (George Mason University); Ahmed S. Alghamdi (University of Jeddah))*
16:10	**552 - Multitask Contrastive Learning using Task-Wise Training and Partitioned Embedding Space** *(M Shifat Hossain (University of Central Florida)*; Sumit Kumar Jha (Florida International University); Hao Zheng (University of Central Florida); +1 more)*	**216 - Edu-EmotionNet: Cross-Modality Attention Alignment with Temporal Feedback Loops** *(S M Rafiuddin (Oklahoma State University)*)*	**489 - Code Generation with Small Language Models: A Codeforces-Based Study** *(Debora Souza (Federal University of Campina Grande)*; Rohit Gheyi (Federal University of Campina Grande); Lucas Albuquerque (Federal University of Campina Grande); +2 more*
16:30	**220 - Data-augmentation Technique Using Helpful AI-generated Images for Training** *(Daichi Murata (Hitachi Ltd.)*; Tatsumi Uezato (Hitachi Ltd); Yusuke Matsuda (Hitachi Ltd); +3 more)*	**308 - Label-Efficient Human Activity Recognition from Wearables via Self-Supervised Representation Learning** *(Taoran Sheng (The University of Texas at Arlington)*; Manfred Huber (The University of Texas at Arlington))*	**520 - Federated Boolean Matrix Factorization Using Integer Programming** *(Duy Nhat Phan (University of Dayton)*; Quynh Anh Nguyen (University of Dayton); Thuy Ngoc Nguyen (University of Dayton))*
16:50	**264 - Sliced-Wasserstein Distance-based Data Selection** *(Julien Pallage (Polytechnique Montreal, Mila, GERAD)*; Antoine Lesage-Landry (Polytechnique Monteal, Mila, GERAD)*	**436 - Return-to-Work Classification of Occupational Injury Claims via Rank-Ordering** *(Gonzalo Vivian (Florida Atlantic University); Chelsea Zuvieta (Florida Atlantic University); Taghi Khoshgoftaar (Florida Atlantic University)*)*	**82 - Meta-TTT: A Meta-learning Minimax Framework For Test-Time Training** *(Soumik Mondal (A*STAR); Chen Tao (A*STAR)*; Li Shen (Sony))*
17:10	**458 - Drug Repurposing Using Deep Embedded Clustering and Graph Neural Networks** *(Luke Delzer (University of Colorado Colorado Springs)*; Robert Kroleski (University of Colorado Colorado Springs); Ali AlShami (University of Colorado Colorado Springs); +1 more)*	**377 - Survival Analysis for Employee Retention Prediction in Retail and Trade Sector Organizations** *(Xingquan Zhu (Florida Atlantic University); Ariel Augusto Gonzalez Batista (Florida Atlantic University)*)*	**25C :Springer Nature — Journal of Big Data** **Room: Royal Palm 3**
17:30	**540 - Mamba World Model for RL: Enhancing Long-term Memory in Model-based Reinforcement Learning** *(Mingcong Cao (UW-Madison)*; Yucheng Huang (UW-Madison); Suat Gumussoy (Simens); +1 more)*	**522 - Improving Internet Traffic Matrix Prediction via Time Series Clustering** *(Martha Cash (Worcester Polytechnic Institute)*; Alexander Wyglinski (Worcester Polytechnic Institute))*	**Springer Nature — Journal of Big Data** **Author Workshop and Special Issue** **Esinu Abadjivor**
17:50		**550 - TTQA-RS- A break-down prompting approach for Multi-hop Table-Text Question Answering with Reasoning and Summarization** *(Jayetri Bardhan (University of Florida)*; Bushi Xiao (University of Florida); Daisy Zhe Wang (University of Florida))*	
18:10	**Break**		
18:30	**Panel : AI Technology** **Moderator : Van Hipp** **Panelists : Gabe Musso, Tim White, Drayton Wade, Hamlet Yousef, Dimitros Pados** **Room : Royal Palms**		
19:30	**Dinner and Award** **Javad Hasemi, Associate Dean of Research at COE&CS - FAU, Dinner Speaker** **Room : Grand OASIS Ballroom**		
21:00	**End of the day**		

Friday, December 5 - Day 3

7:30	**Registration (till 5:00pm) and Continental Breakfast**		
8:00	**Daily Remarks** **Room : Grand OASIS Ballroom**		
8:15	**Keynote Speaker : Tomer Lancewicki** **Modernizing Medicine** **Beyond Record-Keeping: The Future of Electronic Health Records with AI** **Room : Grand OASIS Ballroom**		
9:15	**Coffee Break**		
	ROYAL PALM 1	**ROYAL PALM 2**	**ROYAL PALM 3**
	31A:SS1 : Deep Learning and Applications **Chair: Vasile Palade** **Room: Royal Palm 1**	**31B:SS3: Multi-modal Machine Learning in Practice** **Chair: Md Belayat Hossain** **Room: Royal Palm 2**	**31C:SS5:Generative AI, Transformers and Applications** **Chair: Zag Elsayed** **Room: Royal Palm 3**
9:30	**491 - Design and Validation of a YOLOv8 Synthetic Data Generation Pipeline for Surface Defect Detection in Manufacturing** *(Armin Moghadam (San Jose State University)*, Sahib Bhatia (San Jose State University), Fatemeh Davoudi Kakhki (Santa Clara University),+1 more)*	**282 - Multimodal Foundation Models for Zero-Shot Water Stress Forecasting in Precision Agriculture** *(Seyed Hamidreza Nabaei (University of Virginia)*, Zeyang Zheng (University of Virginia), Dong Chen (University of Virginia), +1 more)*	**378 - MCP-AI: Protocol-Driven Intelligence Framework for Autonomous Reasoning in Healthcare** *(Zag ElSayed (UC)*, Craig Erickson (CCHMC), Ernest Pedapati (CCHMC)*
9:50	**493 - An Explainable Dynamic Few-Shot Learning Framework for GERD and Polyp Detection in Endoscopic Imaging** *(Md Hasan Imam Bijoy (Daffodil International University)*, Dewan Aminul Islam (Florida Atlantic University), Susmoy Biswas (Daffodil International University), +3 more)*	**379 - Prompt Learner for Industrial Anomaly Detection: Towards Generalizable Multimodal Defect** *(Yen Han Chiang (National Center for High-performance Computing National Applied Research Laboratories)*, Pablo Molla (National Institute of Informatics), Yi-Lun Pan (National Center for High-performance Computing Department of Computer Science), +1 more)*	**460 - Tabular Data with Class Imbalance: Predicting Electric Vehicle Crash Severity with Pretrained Transformers (TabPFN) and Mamba-Based Models** *(Shriyank Somvanshi (Texas State University)*, Pavan Hebli (Texas State University), Gaurab Chhetri (Texas State University), +1 more)*
10:10	**614 - Advances in Deep Learning for Lymphoma Detection and Region Segmentation in Medical Imaging** *(Aslam Muhammad (University of Engineering and Technology, Lahore)*)*	**549 - A Multimodal Machine Learning Approach for Solar Flare Prediction using Polarity Inversion Lines Data** *Ziba Khani (Georgia State University)*, Reza Mansouri (Georgia State University), Berkay Aydin (Georgia State University)*	**530 - LLMs as Agentic Cooperative Players in Multiplayer UNO** *(Yago Romano Martinez (Tennessee Tech University)*, Jesse Roberts (Tennessee Tech University)*
10:30	**626 - Rep Smarter, Not Harder: AI Hypertrophy Coaching with Wearable Sensors and Edge Neural Networks** *(Grant King (University of South Carolina)*, Musa Azeem (University of South Carolina), Savannah Noblitt (University of South Carolina),+2 more)*	**654 - Background-Aware Instance Segmentation for Early Detection of E. coli and Salmonella in Time-Stamped Microscopy Images** *(Bibek Koirala (Southern Illinois University Carbondale), Anas AlSobeh (Southern Illinois University Carbondale)*, Namariq Dhahir (Southern Illinois University Carbondale), +1 more)*	**618 - Generation of Programmatic Rules for Document Forgery Detection Using Large Language Models** *(Valentin Schmidberger (Hochschule der Medien), Manuel Eberhardinger (Hochschule der Medien)*, Setareh Maghsudi (Ruhr-University Bochum), +1 more)*
10:50	**Coffe Break**		
	32A:SS1 : Deep Learning and Applications **Chair: Arif Wani** **Room: Royal Palm 1**	**32B:SS3: Multi-modal Machine Learning in Practice** **Chair: Md Belayat Hossain** **Room: Royal Palm 2**	**32C: Language and Regional Context** **Chair: Farhan Rahman Arnob** **Room: Royal Palm 3**
11:10	**641 - Beyond a Single Perspective: Neural Fusion of Lévy-Generated Super-Resolution Images for Robust Face Recognition** *(Marcelo Santos (Federal University of Parana), Joao Neves (Universidade Beira Interior), David Menotti (Federal University of Parana)**	**663 - Privacy-Preserving Multimodal Stress Detection from Wearables with Attention Fusion and Federated Learning** *(Mohd Farhan Israk Soumik (Southern Illinois University Carbondale), Ebrahim Maghsoudlou Nima (Southern Illinois University Carbondale), Hussein Zangoti (Jazan University)* ,+2 more)*	**371 - Clustering and Explainable AI for Supporting Energy Contracting in the Brazilian Free Energy Market** *(Sergio Junior (Instituto de Ciencias Matematicas e de Computacao ICMC))*; Gabriel Matz (Volt Robotics); Marcos Basile (Volt Robotics); +7 more)*
11:30	**644 - LORADOCTOR:LLM-Driven Diagnosis and Adaptive Policy Optimization for Reducing Packet Error Rate in LoRaWAN Networks** *(Dongyi Ma (University College London), Aitian Ma (Florida International University)*, Sirui Luo (University College London)*	**668 - JaiLIP: Jailbreaking Vision-Language Models via Loss Guided Image Perturbation** *(Md Jueal Mia (Florida International University)*, M. Hadi Amini (Florida International University)*	**562 - Lacium Flower: Learning Phonological Representations for Literacy Tasks in Low-Resource Scenarios for Brazilian Portuguese** *(Geraldo Gomes da Junior (UFPE)*; Robson Fidalgo (UFPE))*
11:50	**673 - Adversarially-Refined VQ-GAN with Dense Motion Tokenization for Spatio-Temporal Heatmaps** *(Gabriel Maldonado (University of North Carolina at Charlotte), Narges Rashvand (University of North Carolina at Charlotte)*, Armin Danesh Pazho (University of North Carolina at Charlotte), +3 more)*	**676 - Pi-talk: Edge-Only, Adapter-Tuned Multimodal Small Language Model for Safe, Real-Time In-Vehicle Dialogue** *(Alex Pissinou Makki (Duke)*, Vahid Tarokh (Duke), Luis Enamorado (FIU), +3 more)*	**572 - A Multilingual Evaluation of Large Language Models for Generating Phonological Exercises via Linguistic Heuristic Guidance** *(Geraldo Gomes da Junior (UFPE)*; Robson Fidalgo (UFPE))*
12:10	**678 - CLIPS: Continual Learning Infrastructure for Plastics Sorting** *(Shivm Mehta (Williamsville East High School)*, Vaishali Maheshkar (University of Buffalo), Charuvahan Adhivarahan (University of Buffalo), +1 more)*	**696 - Morphological-Inspired Optimization with Deep Learning for Sedimentary Particle Segmentation in Petrographic Microscope Images** *(Tahmid Anjum Bin Haroon (Southern Illinois University Carbondale)*, Md Golam Kibria (Morehead State University), Md Belayat Hossain (Southern Illinois University Carbondale)*	
12:30	**Lunch** **Room : Grand OASIS Ballroom**		
	33A:SS1 : Deep Learning and Applications **Chair: Vasile Palade** **Room: Royal Palm 1**	**33B:SS4: Robustness and Security of LLM** **Chair: Ahmed Imteaj** **Room: Royal Palm 2**	**33CAdvanced Computational Techniques** **Chair: Sayan Mandal** **Room: Royal Palm 3**
13:50	**679 - Improving Long-Term HDD RUL Prediction Using a Novel Feature Engineering Approach** *(Francisco Lucas Pereira (Federal University of Ceara)*, Victor Farias (UFC), Felipe Brito (UFC), +2 more)*	**627 - SecureFixAgent: A Hybrid LLM Agent for Automated Python Static Vulnerability** *(Jugal Gajjar (The George Washington University)*, Kamalasankari Subramaniakuppusamy (The George Washington University), Relsy Puthal (The George Washington University) , +1 more)*	**77 - Deep Learning for Unrelated-Machines Scheduling: Handling Variable Dimensions** *(Diego de Oliveira Hitzges (Technische Universitat Berlin)*; Guillaume Sagnol (Technische Universitat Berlin)*
14:10	**683 - Anti-Submarine Warfare Planning Using Public Belief States and Self-Play** *(Christoffer Limer (Swedish Defence Research Agency), Joel Brynielsson (KTH Royal Institute of Technology)*, Mika Cohen (KTH Royal Institute of Technology), +1 more)*	**646 - LLMZ+: Contextual Prompt Whitelist Principles for Agentic LLMs** *(Tom Pawelek (Mississippi State University)*, Raj Patel (The University of Alabama), Charlotte Crowell (The University of Alabama), +3 more)*	**266 - Enhancing 3D Semi-Supervised Teeth Segmentation with Voxel Entropy-Guided Self-Learning** *(Elbadry Elbadry (Alexandria University)*; Mahmoud Gamal (Alexandria University); Marwa Baraka (Alexandria University); +1 more)*
14:30	**685 - Iterative Denoising Autoencoders with Adaptive Iterations Trained Using Sum Iteration Losses** *(Shiquan He (Worcester Polytechnic Institute)*, Randy Paffenroth (Worcester Polytechnic Institute)*	**649 - Detection of LLM Hallucinations Using Late Internal Representations** *(Sakhawat Hossan (University of North Carolina Greensboro)*, Jing Deng (University of North Carolina Greensboro)*	**355 - SR4-Fit: An Interpretable and Informative Classification Algorithm Applied to Prediction of U.S. House of Representatives Elections** *(Shyam Sundar Murali Krishnan (University of Oklahoma)*; Dean Hougen (University of Oklahoma))*
14:50	**690 - Causal Time Series Modeling of Supraglacial Lake Evolution in Greenland under Distribution Shift** *(Emam Hossain (University of Maryland Baltimore County)*, Muhammad Hasan Ferdous (University of Maryland Baltimore County), Devon Dunmire (KU Leuven), +2 more)*	**650 - Breaking and Securing Vision-Language Models: An Adversarial Robustness Study** *(Md Zarif Hossain (Florida Atlantic University), Abdur R. Shahid (Southern Illinois University Carbondale), Ahmed Imteaj (Florida Atlantic University)**	**375 - A Transformer-Based Cross-Platform Analysis of Public Discourse on the 15-Minute City Paradigm** *(Gaurab Chhetri (Texas State University)*; Darrell Anderson (Texas State University); Boniphace Kutela (Texas A&M Transportation Institute); +1 more)*
15:10	**702 - Causal Autoencoder-like Generation of Feedback Fuzzy Cognitive Maps with an LLM Agent** *(Panda Akash (University of Southern California), Olaoluwa Adigun (University of Southern California)*, Bart Kosko (University of Southern California)*	**675 - Improving Robustness of Large Language Models Used in Healthcare Through Prompt Engineering** *(Jonathan O'Berry (University of North Florida)*, Indika Kahanda (University of North Florida), Upulee Kanewala (University of North Florida)*	**437 - Supervised Contrastive Disentanglement for Classification** *(Joshua Luo (The Westminster Schools)*; Luke Zhong (Germantown Friends School); Feiyang Cai (Clemson University); +1 more)*
15:30	**703 - Improving Geolocalization with Social Media Captions: A Retrieval Based Approach** *(Sebastian Oberg (FOI Swedish Defence Research Agency)*, Anton Ljungar (FOI Swedish Defence Research Agency), Edward Tjornhammar (FOI Swedish Defence Research Agency), +1 more)*	**687 - Jailbreaking Large Vision Language Models in Intelligent Transportation Systems** *(Badhan Chandra Das (Florida International University)*, Md Tasnim Jawad (Florida International University), Md Jueal Mia (Florida International University), +2 more)*	**554 - Semantic Segmentation of Kale Plant Images Using Deep Learning for Phenotypic Feature Analysis** *(Halima Audu (Bowie State University)*; Varun Kumar Reddy Dodda (Bowie State University); Ruth Agada (Bowie State University); +1 more)*
15:50	**Coffe Break**		
16:15	**Closing Session** **Room : Grand OASIS Ballroom**		
17:00	**End of Program**		

Wednesday, December 3 - Day 1
Poster Session and Reception
Room : Grand OASIS Ballroom

				POSTER SESSION 1
	Session	Poster	ID	MAIN TRACK (Session Chairs: Huanjing Wang, Kehan Gao)
17:00	1	1	45	Multi-Modal Engagement Recognition with Swin Transformer and Head Pose Estimation
17:00	1	2	75	Can a Machine Learning Model Consistently Learn Profitable Trading Strategies in the Forex Market?
17:00	1	3	93	Localized Uncertainty Quantification in Random Forests via Proximities
17:00	1	4	140	Explainable Gait Abnormality Detection Using Dual-Dataset CNN-LSTM Models
17:00	1	5	147	Hierarchical Scoring for Machine Learning Classifier Error Impact Evaluation
17:00	1	6	158	Spatiotemporal Wildfire Prediction and Reinforcement Learning for Helitack Suppression
17:00	1	7	159	A Novel Framework for Vehicle Detection and Dynamic Light Control via YOLOv8n on Edge-Deployed IMX500
17:00	1	8	166	Point-RTD: Replaced Token Denoising for Pretraining Transformer Models on Point Clouds
17:00	1	9	169	NeuCODEX: Edge Cloud Co-Inference with Spike-Driven Compression and Dynamic Early-Exit
17:00	1	10	192	Post-Training Quantization without BN Statistics: A Data Free Approach
17:00	1	11	194	Guided and Unguided Conditional Diffusion Mechanisms for Structured and Semantically-Aware 3D Point Cloud Generation
17:00	1	12	195	Diabetic Retinopathy Lesion Segmentation through Attention Mechanisms
17:00	1	13	205	EdgeProfiler: A Fast Profiling Framework for Lightweight LLMs on Edge Using Analytical Model
17:00	1	14	208	Hybrid Deep Learning Models for the Prediction of Some Experimental Quantities of Molecules
17:00	1	15	209	An Autoencoder-based Feature Selection with Optimized Reconstruction Loss and Feature Scoring
17:00	1	16	214	Neural Oceans: Physics-Informed Deep Learning for Underwater Marine Debris Forecasting
17:00	1	17	215	Physics-Informed Neural Networks for Soil Moisture Modeling: Toward Rainfall-Induced Landslide Susceptibility Assessment
17:00	1	18	228	Towards Reliable Reasoning in Large Vision-Language Models
17:00	1	19	230	Toward Unified Moderation of Cyberbullying Across Social Media and Video Games
17:00	1	20	235	ShelfRectNet: Single View Shelf Image Rectification with Homography Estimation
17:00	1	21	242	LVADNet3D: A Deep Autoencoder for Reconstructing 3D Intraventricular Flow from Sparse Hemodynamic Data
17:00	1	22	258	LIGHT-HIDS: A Lightweight and Effective Machine Learning-Based Framework for Robust Host Intrusion Detection
17:00	1	23	259	AQUA-LLM: Evaluating Accuracy, Quantization, and Adversarial Robustness Trade-offs in LLMs for Cybersecurity Question Answering
17:00	1	24	263	Oracle-Guided Soft Shielding for Safe Move Prediction in Chess
17:00	1	25	269	Label-Guided Imputation via Forest-Based Proximities for Improved Time Series Classification
17:00	1	26	276	Integrating Prior Observations for Incremental 3D Scene Graph Prediction
17:00	1	27	277	Robot Learning Framework using Behavioral Cloning and Gaussian Mixture Model (BC-GMM) for Sorting Tasks
17:00	1	28	304	Difficulty-Driven Fine Training for WisdomNet
17:00	1	29	313	Reducing Exposure Bias in Deep Learning Models for GPU Temperature Prediction in Data Centers
17:00	1	30	333	Bounomodes: the grazing ox algorithm for exploration of clustered anomalies
17:00	1	31	341	Kolmogorov-Arnold Networks in Low-Data Regimes: A Comparative Study with Multilayer Perceptrons
17:00	1	32	352	LUMIN: Language-based Understanding and Multimodal Interface for NASA PDS
17:00	1	33	364	MOTIF: Modular Thinking via Reinforcement Fine-tuning in LLMs
17:00	1	34	387	Perception-based multiplicative noise removal with Diffusion models
17:00	1	35	392	Unitary Vision: Deep Learning with Information Decorrelation for Signal Reconstruction
17:00	1	36	401	Energy Efficiency for Automobile A/C Systems Using Machine Learning Algorithms
17:00	1	37	409	Applying LLMs to the Classification of Cybersecurity Incident Tickets in a Few-Shot Scenario
17:00	1	38	415	Memory-Augmented Log Analysis with Phi-4-mini: Enhancing Threat Detection in Structured Security Logs
17:00	1	39	418	Information Theoretic Threshold Tuning in Parallel Stochastic Quantizer Architectures
17:00	1	40	425	Axes-Oblique Partitioning for Local Model Networks with RFIR Models
17:00	1	41	427	Adaptive Contrastive Learning for Understanding Procedural Activities
17:00	1	42	434	Deep Learning for Third Molar Segmentation: An Empirical Analysis on Dental Radiographs
17:00	1	43	442	Influence of Stratified Variable Encoding on Quality of Mortality Prediction in Systolic Heart Failure
17:00	1	44	446	Explainable Artificial Intelligence in Robotics: A Review of Applications and Methods
17:00	1	45	447	From Uncertainty to Clarity: Projecting Points onto Classification Boundaries Using Distance Metrics
18:25				POSTER BREAK (Change of Posters)

				POSTER SESSION 2
	Session	Poster	ID	MAIN TRACK (Session Chair : Safak Kayikci)
18:35	2	1	179	An Empirical Study on the Application of TDA to Deep Neural Networks
18:35	2	2	291	A Reward-Driven Controller for Text Generation with Black-Box Language Models
18:35	2	3	448	Bilevel-Optimized Clustered and Distributed Federated Learning Secured by Blockchain for Building Energy Forecasting
18:35	2	4	450	AdverDiff: Leveraging Diffusion-Based Augmentation for Robust Semantic Segmentation
18:35	2	5	461	A New Federated Learning Approach for Imbalanced Medical Image Datasets
18:35	2	6	466	Efficient Edge Inference via Entropy and Magnitude-Aware Feature Map Pruning in Partitioned CNNs
18:35	2	7	478	Enhancing Multi-Agent Collaboration with Attention-Based Actor-Critic Policies
18:35	2	8	481	Strategy Masking: A Method for Guardrails in Value-based Reinforcement Learning Agents
18:35	2	9	487	Offline Reinforcement Learning Benchmark for Variable Speed Limit Control with Real-World Dataset
18:35	2	10	495	Learning from Incomplete Logs: Dual-Task Failure Prediction for Natural Gas Compressor Units
18:35	2	11	502	Detecting Sliver DNS Command and Control (C2) Beaconing Using LSTM Neural Networks
18:35	2	12	507	Event Detection in Dark Web and Surface Web Forums using Machine Learning
18:35	2	13	508	Toward Data-Driven Surrogates of the Solar Wind with Spherical Fourier Neural Operator
18:35	2	14	518	Iterative Tensorization of Physics-Informed Neural Networks
18:35	2	15	533	Detecting Patient and Healthy People's Personalized Breathing Patterns with Few-Shot Learning
18:35	2	16	539	A Data-Driven Approach for Sleep Stage Detection Using Machine Learning and Feature Selection Algorithms
18:35	2	17	545	A Self-Supervised Auxiliary Learning Approach for Effective Depression Screening
18:35	2	18	553	Optimizing Equitable Access to Opportunities within Salesforce Networks using Reinforcement Learning-Driven Graph Augmentation
18:35	2	19	555	Multiclass Hate Speech Detection: Evaluating 303 Model Configurations Across Traditional Machine Learning, Deep Learning, and Transformer Approaches
18:35	2	20	557	Structural Damage Detection Using AI Super Resolution and Visual Language Model
18:35	2	21	560	Jailbreaking Large Language Models: Safety Alignment, Response Quality, Computational Cost
18:35	2	22	569	BlendCLR: Graph Contrastive Learning-Driven Inverse Design of Miscible Polymer Blends for Tough, Gas-Selective Membranes
18:35	2	23	570	Analyzing Code Injection Attacks on LLM-based Multi-Agent Systems in Software Development
18:35	2	24	574	Spontaneous organization of diverse human color representations: from trichromacy to dichromacy in neural networks trained with retina-like inputs
	Session	Poster	ID	SPECIAL SESSIONS (Session Chair : Vasile Palade)
18:35	2	25	173	Semi-Dense Feature Matching via Mamba-Based Knowledge Distillation
18:35	2	26	279	QSeg: Quantum - Classical Segmentation Model for Breast Cancer Images
18:35	2	27	524	Adversarial-Resilient RF Fingerprinting: A CNN-GAN Framework for Rogue Transmitter Detection
18:35	2	28	608	SD-GNN: Sparse Dynamic Graph Neural Networks for Scalable Knowledge Graph Reasoning
18:35	2	29	622	iDiffODE: Learning Continuous-Time Latent Dynamics for Generative Spatiotemporal Modeling
18:35	2	30	640	Learning from Execution Graphs: A Graph Neural Network Approach to Malware Detection
18:35	2	31	651	HierTTF: Hierarchical Two-Stage Time-to-Failure Prediction for Datacenter SSDs Using Telemetry
18:35	2	32	652	AI-Driven Prediction of Material Deformation: Stress-Strain Curves Faster Than Crystal Plasticity Finite Element Simulation
18:35	2	33	657	Automated Clinical Coding with Multiclass ICD Prediction
18:35	2	34	662	Real-Time Remaining Useful Life Prediction with LSTM Priority Resampling
18:35	2	35	664	Monte Carlo–Type Neural Operator for One-Dimensional Differential Equations
18:35	2	36	677	Genotype-to-Phenotype Associations in Yeast with Frequented Region Variants and Deep Learning
18:35	2	37	681	YOLO-Based Object Detection for Automated Identification of IVC Filters in Abdominal CT Imaging
18:35	2	38	689	Ensembles of Statistically Independent Models: A Method for Semi-Supervised Domain Adaptation
18:35	2	39	201	Retrieval-Augmented Multi-Agent System for Rapid Statement-of-Work Generation
18:35	2	40	365	Black drama: between hate speech and algorithmic racism
18:35	2	41	433	Reducing Domain Gap with Diffusion-Based Domain Adaptation for Cell Counting
18:35	2	42	589	BRAINS: A Retrieval-Augmented System for Alzheimer's Detection and Monitoring
18:35	2	43	629	LLM Chatbot for Autonomous User Support in High-Performance Computing (HPC)
18:35	2	44	642	NLD-LLM: A Systematic Framework for Evaluating Small Language Transformer Models on Natural Language Description
18:35	2	45	667	Language Models as Decision Support Systems for Directional Network Maneuvering
20:00				End of the Day

Keynote Speaker: Michael Koeris

Title: Biotechnology for National Security in the Age of Autonomy

Abstract:

AI/ML is transforming biotechnology; but the transformative power of autonomous science has great potential for misuse by rogue actors. That's where DARPA's Biological Technologies Office comes in. Through its mission statement of defending the homeland and strengthening national security through its twin pillars of Defense-In-Depth and Surprise-At-Scale, BTO is partnering with some of the nation's leading research institutions to ensure that the US maintains an enduring advantage on the frontier of emerging AI-enabled biotechnology.

Bio:

Michael Koeris, Ph.D., joined DARPA as the director of the Biological Technologies Office in April 2024. His research and teaching focus on all aspects of chemistry, manufacturing, and control for microbiome medicines, as well as advanced cell and gene therapy approaches.

Before coming to DARPA, Koeris served as professor of bioprocessing and as a member of the Amgen Bioprocessing Center in the Department of Biological Engineering and Management at the Keck Graduate Institute.

He also advised the NIH's RADx initiative as a Portfolio Executive, assisting with the rapid development, clinical validation, manufacturing and distribution of Sars-CoV-2 diagnostic tests throughout the pandemic. Prior to joining KGI in 2020, Koeris actively started, grew, and exited biotechnology startups, both as founder and senior leader, as well as a member of the Board of Directors. He holds more than a dozen patents through the U.S. and internationally. His entrepreneurial career began by spinning out Sample6, which was recognized by Forbes as one of the 25 hottest AgTech startups in 2017 and was acquired later that year.

Koeris serves as a Board Director of global, non-profit repository AddGene, and in the past served on boards of commercial biotech entities.

Keynote Speaker: Nikolaos Bourbakis

Title: Machine Learning and People with Special Needs

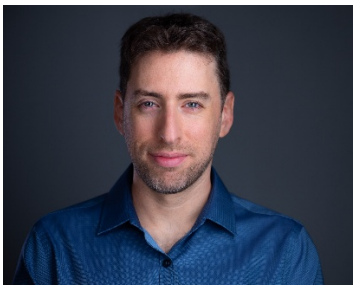
Abstract:

This talk offers a quick introduction of a few topics associated to special needs for people ith disabilities and how Machine Learning (which is part of AI) can play a vital role for them. small number of research projects will be presented, in brief, to show a humane use of AI-ML. These topics are: Blind: Navigator-Reader-Recognizer; A Robotic Assistant for Elderly & Disabilities; A pair of shoes for Paraplegic; An expert system for autodiagnosis of health conditions.

Bio:

Dr. Nikolaos Bourbakis (IEEE Life Fellow, AAIA Fellow) has served as an Ohio Board of Regents Distinguished Professor, as an Administrator (Associate Dean) as a Director of the Information Technology Research Institute (ITRI) at WSU and in various University & Industry positions, like OSU in Ohio - SUNY in New York – IBM in California - GMU in Virginia - U-Patras in Greece. Recently he is the Director of the Biological & Artificial Intelligence Foundation, OH - a Research Professor at Purdue University and a Member of the Board of Trusts at the Technical University of Crete, Greece. He is the founder of several IEEE International Conferences (ICTAI, ICBIBE, ICIISA, ISAT, etc) and he has chaired most of them the last 37 years. He is also the founder of 3 International Journals and served as an Associate Editor in several IEEE and International ones. He has extensively published and conducted research on Applied Artificial Intelligence - Bioengineering & Assistive Robotic Technologies - Cyber Security funded by NSF, AFL, ONR, AFRL, DARPA, Industry and internationally recognized with high prestigious awards.

Keynote Speaker: Tomer Lancewicki



Title: Beyond Record-Keeping: The Future of Electronic Health Records with AI

Abstract:

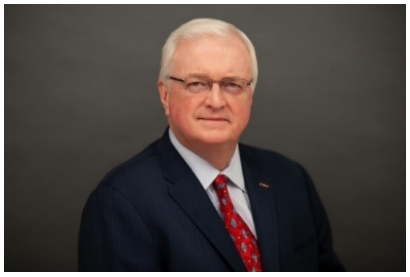
Electronic Health Records (EHRs) remain central to healthcare delivery but continue to impose significant documentation and workflow burdens on clinicians. Advances in Machine Learning and agentic AI provide opportunities to reconceptualize EHRs as intelligent systems that actively support clinical practice rather than passively record it. In this talk, we will examine recent developments and ongoing work in the healthcare industry where AI techniques are being applied to address the challenges of automation, compliance, and clinical decision support.

Bio:

Dr. Tomer Lancewicki is Vice President of AI/ML at ModMed, a pioneer in specialty-specific healthcare SaaS technology. Dr. Lancewicki is a highly respected academic and an expert in applying advanced AI, deep learning, and machine learning across large-scale, data-intensive enterprises. Before joining ModMed, he served as Director of AI and Machine Learning at Walmart Global Tech, where he led large teams in implementing ML solutions to streamline complex operations. Prior to Walmart, he held notable technology leadership positions at eBay and other innovative technology firms. Dr. Lancewicki holds a PhD in Electrical and Computer Engineering. He has published scientific research and is the inventor on multiple patents. He also serves as an Adjunct Professor of Computer Science at Northeastern University.

Panel: AI Technology

Moderator: Van Hipp



Van Hipp is Chairman of American Defense International, Inc. He's a former Chairman of the South Carolina Republican Party, as well as a former member of the Presidential Electoral College. In 1990, he was sworn in as Deputy Assistant Secretary of the U.S. Army (Reserve Forces and Mobilization). In this capacity, he served as the Army Secretariat's "point man" for the successful mobilization, and then demobilization, of the Army's reserve forces for Operation Desert Shield/Storm. Following the "Tailhook Scandal," Hipp was named as the Principal Deputy General Counsel of the U.S. Navy. Hipp served in this capacity until January 1993.

Hipp is a veteran of the U.S. Army and served on active duty in both Operation Desert Storm and Operation Restore Democracy. He is a recipient of the Bronze Star Medal. He continues to speak on defense issues at public forums across the country and writes a regular column for Newsmax on International Policy. His book, "The New Terrorism: How to Fight It and Defeat It," was published in February 2015. One hundred percent of all proceeds go to scholarships for the children of fallen Guardsmen and Guardsmen wounded in action in the War on Terror. All scholarships are being administered by the National Guard Educational Foundation (NGEF).

Since the September 11th attacks, Hipp has appeared on the Fox News Channel and Fox Business Channel well over 600 times as an expert commentator on the War on Terror and has been a guest on most of the network's major news programming. In addition, he has appeared on MSNBC, CNN, the London-based Sky News Channel, Newsmax TV, and the CBS Evening News.

He currently serves as a member of the Board of Visitors of Charleston Southern University, as a member of the National Capital Salvation Army Advisory Board, and as a member of the Board of Directors of the Palmetto Promise Institute. In addition, Van Hipp was the recipient of the Salvation Army National Capital Area Command's 2015 "Compassionate Citizen Award." On November 3rd, of 2016 he presented a lecture entitled "The Greatest Challenge Of Our Next President: Keeping America Safe During These Times" at the Gerald R. Ford Presidential Museum in Grand Rapids, MI. He also served as moderator for two National Security Town Halls for President Donald Trump during the 2016 presidential election cycle. Recently, he has been elected to the Board of Trustees for the American Battlefield Trust.

Hipp received his bachelor's degree in Economics from Wofford College and earned his Juris Doctor from the University of South Carolina School of Law. In 2014, Hipp was the recipient of Wofford College's Distinguished Service Award. In addition, he was the recipient of the Queen Elizabeth II September 11th Garden Leadership Award for National Security in May 2018.

Van Hipp is married to the former Jane Grote of Nashville, Tennessee, and they have three children: Trey, Sarah Camille, and Jackson. Van and his family split their time between Alexandria, VA and Georgetown, SC.

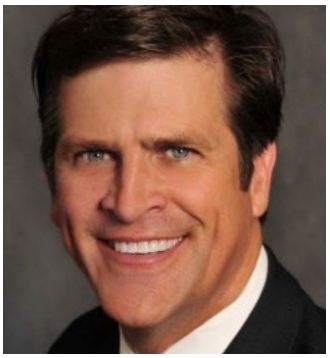
Panel: AI Technology

Panelist: Gabe Musso

Dr. Musso has a background in molecular genetics (PhD), and did post-doctoral work at Harvard Medical School and Brigham and Women's Hospital on computational and developmental biology. He spent time at a start-up working on real-time machine learning before joining with others to start BioSymetrics (acquired by Lunai Bioworks) with the aim of tackling the specific challenges of working with biomedical data to improve disease diagnosis and expedite early-stage drug discovery. He was named one of the top 100 leaders in AI and drug discovery and has authored over 30 peer reviewed publications on AI/ML and biology.

Panel: AI Technology

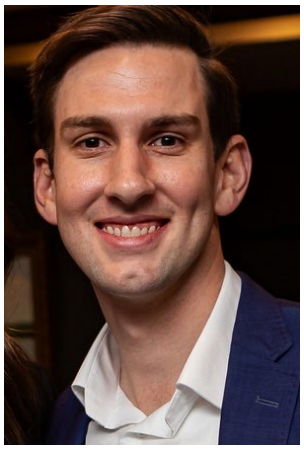
Panelist: Tim White



Tim White is the president of Combs & Greyfield Company, a systems engineering group supporting multiple research and development projects focused on capabilities development for government entities. He is also the General Manager of Sertainty Federal, an information security company. Tim has spent over 30 years in government operations and designing and developing capabilities for government organizations. This work has included business leadership roles as well as systems engineering in the development of analytic capabilities and cyber-defense systems for the US Government at companies that include Northrup Grumman, Cray and General Dynamics. His customers have included professional sports teams, top five banks, international law enforcement, and a range of the US Government entities in the Intelligence Community, Department of Defense, and other Federal agencies. He is a military veteran with over 20 years of service in US Army Special Forces serving in a multitude of roles from operator to technical capability development. He served for 5 years on the Advisory Board for the Hal Marcus School of Science and Engineering at the University of West Florida. Tim is a graduate of the University of Mississippi with a Bachelors in Anthropology and Mathematics.

Panel: AI Technology

Panelist: Drayton Wade



Drayton Wade is a multi-time entrepreneur currently serving as Head of Operations in charge of all non-engineering functions for ReflectionAI, an $8B AI startup building openweight,

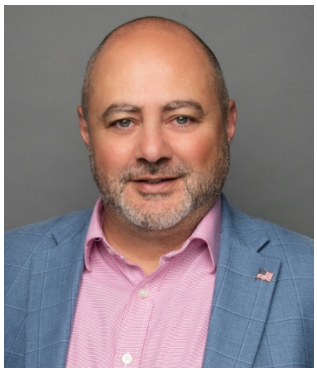
American made large language models. Drayton joined Reflection (backed by Nvidia, Lightspeed, Sequoia and others) as the first non-engineer, responsible for establishing and scaling core operations, finance, sales and marketing functions. Since joining, Reflection has grown from a small research team, to a well established frontier lab and raised over $2B to further its mission of bringing top-performing open-weight models to business, the US government and Sovereign AI projects with allied nations.

Prior to Reflection Drayton served in various roles at startups from seed stage through IPO including stints as COO of Kognitos (AI startup) and as Sr. Director at UiPath. Outside of work Drayton is actively involved with Clemson University (his undergraduate alma mater), and serves on the Clemson Alumni Association Board of Directors, In 2023 Clemson awarded Drayton the “Roaring 10” award, given to the top 10 young alumni.

Drayton is a frequent speaker on AI topics at universities including Clemson, Dartmouth and the College of Charleston. Drayton earned his BA from Clemson, his MSc in International Relations from the London School of Economics and his MBA from the Tuck School of Business at Dartmouth. He and his wife Jessica (a Charleston area OBGYN), live in Charleston, SC.

Panel: AI Technology

Panelist: Hamlet Yousef



Hamlet Yousef is the Managing Partner at IronGate Capital Advisors, a venture fund focused on investing in dual-use national security/defense related technologies. Prior to starting the fund in 2018, Mr. Yousef most recently worked for the Federal Government in the National Security/Diplomacy sector. He has extensive experience working with a variety of Federal agencies and Departments to address issues related to cybersecurity, counterterrorism, and other National Security challenges emanating nation-state adversaries and nonconventional foes. During his Federal Government experience, Mr. Yousef has substantive experience dealing with use of technology to address Mission Critical needs.

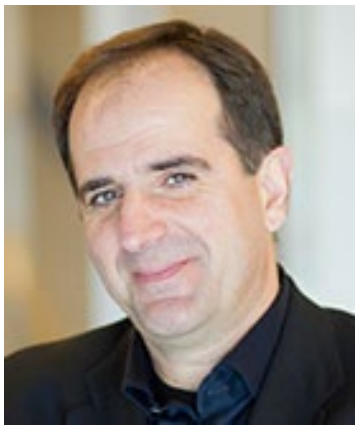
In addition to running IronGate, Mr. Yousef is also the Managing Partner for SABiO Global Advisors, a boutique business intelligence and geopolitical advisory group. In this capacity Mr. Yousef regularly engages private clients, family offices, and the U.S. Government on advising strategies around manufacturing supply chain strategies that take into consideration complex geopolitical dynamics. In addition, SABiO helps conduct complex due diligence and counterparty risk analysis for complex business transactions and joint ventures.

Prior to joining government, Mr. Yousef had extensive experience conducting business development, due diligence, and geopolitical risk analysis in the U.S, Europe, and the Middle East. He worked on behalf of private investors to seek out and perform feasibility analyses on cutting-edge disruptive technologies in the energy and technology sectors. Specifically, Mr. Yousef spent nearly a decade in a variety of sales & marketing roles at Stanley Black and Decker.

Mr. Yousef earned an MBA from Pepperdine University, with an emphasis in International Finance, and a BS in International Business from Florida State University.

Panel: AI Technology

Panelist: Dimitros Pados



Dr. Dimitros Pados is a professor and Charles E. Schmidt Eminent Scholar in the Department of Electrical Engineering and Computer Science at Florida Atlantic University. He directs the Center for Connected Autonomy and Artificial Intelligence (CA-AI).

His research involves communications systems, signal processing, machine learning, autonomous systems, and adaptive robust methods.