

Please consult the weblinks table for Zoom links to different sessions. This table will be posted a few days before the conference.

Monday December 13th: Main Conference and Special Sessions

All times are EST (USA)

8:45am-9:00am	Opening Remarks Ishwar K Sethi		
9:00am-10:15am	Keynote Talk Speaker: Prof. Thomas Dietterich, Distinguished Professor Emeritus, Oregon State University Title: Anomaly Detection for Out-of-Distribution and Open Set Detection		
10:30am-1:00pm	<i>Deep Adversarial Networks-I</i> Session Chair: Anand Ravishankar, anandravishankar12@gmail.com	<i>ML/DL Applications-I</i> Session Chair: Benjamin Parfitt, ben.parfitt@mapware.ai	<i>Clustering and Anomaly Detection-I</i> Session Chair: Arvind Shekar, ArvindKumar.Shekar@de.bose.in
	80. Messing Up 3D Virtual Environments: Transferable Adversarial 3D Objects (regular paper) Enrico Meloni, Matteo Tiezzi, Luca Pasqualini, Marco Gori, Stefano Melacci	65. Detection of Endoscope Withdrawal Time in Colonoscopy Videos (regular paper) Ying Li, Alexander Ding Yu Cao, Benyuan Liu, Shuijiao Chen, and Xiaowei Liu	146. Automated Antenna Testing Using Encoder-Decoder-based Anomaly Detection (regular paper) Hans Hao-Hsun Hsu

	<p>97. Character-level Adversarial Examples in Arabic (regular paper) Basemah A Alshemali, Jugal Kalita</p>	<p>66. Contraband Materials Detection Within Volumetric 3D Computed Tomography Baggage Security Screening Imagery (regular paper) Qian Wang, Toby P Breckon</p>	<p>147. ComFu: Improving Visual Clustering by Commonality Fusion (regular paper) Chunchun Li, Terrance E Boult, Manuel Günther</p>
	<p>187. TopKConv: Increased Adversarial Robustness Through Deeper Interpretability (regular paper) Henry Eigen, Amir Sadovnik</p>	<p>68. ME-TSRN for Thermal Sensation Recognition via Facial Micro-expression (regular paper) Zhao Xinhui, Kai Tang, Kazushige Ouchi</p>	<p>152. CoCluBERT: Clustering Machine Learning Source Code (regular paper) Amir H. Payberah, Marcus Hägglund, Francisco J. Pena, Sepideh Pashami, Ahmad Al-Shishtawy</p>
	<p>217. Universal Adversarial Attack on Deep Learning Based Prognostics (regular paper) Arghya Basak, Pradeep Rathore, Sri Harsha Nistala, Sagar Srinivas Sakhinana, and Venkataramana Runkana</p>	<p>74. Disease Prediction Based on Individual's Medical History Using CNN (regular paper) Monica Krishnamoorthy, Mohammed Sharafath Abdul Hameed, Thomas Kopinski, Andreas Schwung</p>	<p>236. Novelty-based Generalization Evaluation for Traffic Light Detection (regular paper) Arvind Kumar Shekar, Laureen Lake, Liang Gou, Liu Ren</p>
	<p>221. Feature Popularity Between Different Web Attacks with Supervised Feature Selection Rankers (regular paper) Richard Zuech, John Hancock, and Taghi Khoshgoftaar</p>	<p>93. A Novel Convolutional Neural Network For Pavement Crack Segmentation (regular paper) Erkai Li, Huiming tang</p>	<p>241. Anomaly Attribution of Multivariate Time Series using Counterfactual Reasoning (regular paper) Violeta Teodora Trifunov, Friedrich Schiller, Maha</p>

			Shadaydeh, Björn Barz, Joachim Denzler
	<p>230. Improved attribute manipulation in the latent space of StyleGAN for semantic face editing (regular paper) Ashish Rai, Clara Ducher, and Jeremy Cooperstock</p>	<p>103. CiPSI and CiPSINet: a New Dataset and Network for Finding Cars in Panchromatic Satellite Images (regular paper) Benjamin L Parfitt, Tejaishwarya Gagadam</p>	<p>296. Multi-Slice clustering for 3-order tensor (regular paper) Mustapha Lebbah, Dina Faneva Andriantsiory, Joseph Ben Geloun</p>
	<p>270. PollenGAN: Synthetic Pollen Grain Image Generation for Data Augmentation (regular paper) Philipp Viertel</p>	<p>151. Recurrence Plot Spacial Pyramid Pooling Network for Appliance Identification in Non-Intrusive Load Monitoring (regular paper) Marc Wenninger, Sebastian Peter Bayerl, Andreas K Maier, Jochen Schmidt</p>	<p>363. Improved prediction of protein secondary structures using sequence-length based clustering and deep learning (regular paper) MUKHTAR AHMAD SOFI, Arif Wani</p>
	<p>279. ECG-Adv-GAN: Detecting ECG Adversarial Examples with Conditional Generative Adversarial Networks (regular paper) Khondker Fariha Hossain, Sharif Amit Kamran Alireza, Tavakkoli, Xingjun Ma, Lei Pan, Chandan K. Karmakar, and Sutharshan Rajasegarar</p>	<p>166. Seed Classification using Synthetic Image Datasets Generated from Low-Altitude UAV Imagery (regular paper) Venkata Siva Kumar Margapuri, Niketa Penumajji, Mitchell Neilsen</p>	<p>304. A Multi-Scale A Contrario method for Unsupervised Image Anomaly Detection (short paper) Matias Tailanian, Alvaro Pardo, Pablo Musé</p>

	<p>423. Self-Attention mechanism in GANs for molecule generation (short paper) Sandeep Chinnareddy, Apurva Narayan, Pranav Grandhi</p>	<p>443. Identifying Catheter and Line Position in Chest X-Rays Using GANs (regular paper) Nasim Yahyasoltani, Milan Aryal</p>	<p>324. Kernel ridge reconstruction for anomaly detection: general and low computational reconstruction (short paper) Yasutaka Furusho, Yukinobu Sakata, Shuhei Nitta</p>
	<p>255. Guided-Generative Network for noise detection in Monte-Carlo rendering (short paper) Jérôme Buisine, Fabien Teytaud, Samuel Delepoulle, Christophe Renaud</p>	<p>425. Damage Estimation and Localization from Sparse Aerial Imagery (regular paper) Rene A Garcia Franceschini, Saurabh Amin, Jeffrey Liu</p>	
1:15pm-3:20pm	<p><i>NLP</i> Session Chair: Swapna Gokhale, swapna.gokhale@uconn.edu</p>	<p><i>Learning Methods</i> Session Chair: Shai Fine, shai.fine@idc.ac.il</p>	<p><i>Video Analysis and Tracking</i> Session Chair: Derek Gloudemans, derek.gloudemans@vanderbilt.edu</p>
	<p>223. Emotion Recognition and Sentiment Classification using BERT with Data Augmentation and Emotion Lexicon Enrichment</p>	<p>90. Discrete Latent Variables Discovery and Structure Learning in Mixed Bayesian Networks (regular paper) Aviv Peled, Shai Fine</p>	<p>104. Current Advances on Deep Learning-based Human Action Recognition from Videos: a Survey</p>

	(regular paper) Vishwa Sai Kodiyala, Robert Mercer		(regular paper) Yixiao Zhang, Baihua Li, Hui Fang, Qinggang Meng
	234. A Data-driven Affective Text Classification Analysis (regular paper) Saeid Pourroostaei Ardakani, Can Zhou, Xuting Wu, Yingrui Ma, Jizhou Che	233. IVDR: Imitation learning with Variational inference and Distributional Reinforcement learning to find Optimal Driving Strategy (regular paper) Kihyung Joo, Simon Woo	142. Vehicle Tracking with Crop-based Detection (regular paper) Derek Gloudemans, Daniel Work
	341. End-to-End Natural Language Understanding Pipeline for Bangla Conversational Agents (regular paper) Fahim Shahriar Khan, Mueeze A Mushabbir, Mohammad Sabik Irbaz, MD Abdullah Al Nasim	117. Pairwise Margin Maximization for Deep Neural Networks (regular paper) Berry Weinstein, Shai Fine, Yacov Hel-Or	252. Detecting Freezing of Gait in Parkinson's Disease Patient via Deep Residual Network (regular paper) Runfeng Miao, Solaiman Shokur, Andrea Cristina de Lima Pardini
	102. On Natural Language Processing Applications for Military Dialect Classification (regular paper) Charith Gunasekara, Tobias Carryer, Matt Triff	350. Progressive Transmission and Inference of Deep Learning Models (regular paper) Youngsoo Lee, Sangdoon Yun, Yeonghun Kim, Sunghye Choi	351. Improved Deep Representation Learning for Human Activity Recognition using IMU Sensors (regular paper) Niall Lyons, Avik Santra
	369. KerasBERT: Modeling the Keras Language (regular paper) Connor Shorten, Taghi Khoshgoftaar	408. An Effective Baseline for Robustness to Distributional Shift (regular paper) Sunil Thulasidasan, Sushil Thapa,	375. Sensor-Based Obsessive-Compulsive Disorder Detection With Personalised Federated Learning

		Sayera Dhaubhadel Gopinath Chennupati, Tanmoy Bhattacharya, Jeff Bilmes	(regular paper) Kristina Kirsten, Bjarne Pfitzner, Lando Loeper, Bert Anrich
	386. Retrieval Enhanced Ensemble Model Framework For Rumor Detection On Micro-blogging Platforms (regular paper) Rishab Sharma, Apurva Narayan, Fatemeh Fard	445. On Learning Probabilistic Partial Lexicographic Preference Trees (regular paper) Xudong Liu	49. Enhancing Siamese Visual Tracking With Background Relations (regular paper) Chih-Yang Lin, Shang-Chian Yang, Hui-Fuang Ng, Wei-Yang Lin
	461. COVID-HateBERT: a Pre-trained Language Model for COVID-19 related Hate Speech Detection (regular paper) Mingqi Li, Song Liao, Ebuka J Okpala, Max Tong, Matthew Costello, Long Cheng, Hongxin Hu, Feng Luo	262. Towards Knowledge-aware Few-shot Learning with Ontology-based n-ball Concept Embeddings (regular paper) Mirantha Jayathilaka, Tingting Mu, Uli Sattler	420. Few-Shot Classification for Human Context Recognition Using Smartphone Data Traces (short paper) Luke J Buquicchio, Walter Gerych, Abdulaziz Alajaji, Kavin Chandrasekaran, Hamid Mansoor, Elke A Rundensteiner, Emmanuel Agu
	444. A Machine Learning Pipeline to Examine Political Bias with Congressional Speeches (short paper)	309. Batch and online variational learning of hierarchical Pitman-Yor mixtures of multivariate Beta distributions (short paper)	183. Step Detection using SVM on NURVV Trackers (short paper) Didier R. Lopes, Grant Trewartha

	Prasad D Hajare, Sadia Kamal, Siddharth Krishnan, Arunkumar Bagavathi	Narges Manouchehri, Nizar Bouguila, Wentao Fan	
	434. Identifying Duplicate Police Reports (short paper) José Alan Firmiano Araújo, Ticiania L. Coelho da Silva		
3:30pm-5:30pm	<i>ML/DL Applications in Finance</i> Session Chair: Jia Wang, Jia_Wang2@student.uml.edu	<i>Sequences and Time Series Modelling and Classification</i> Session Chair: Victor Adeyemo, V.Adeyemo@leedsbeckett.ac.uk	<i>Reinforcement Learning-I</i> Session Chair: Arthur Müller, arthur.mueller@iosb-ina.fraunhofer.de
	139. Dual-CLVSA: a Novel Deep Learning Approach to Predict Financial Markets with Sentiment Measurements (regular paper) JIA WANG, Harry Zhu, Jiancheng Shen, Yu Cao, Benyuan Liu	69. A Markov Decision Processes Modeling for Curricular Analytics (regular paper) Ahmad Slim, Husain Al Yusuf, Nadine Abbas, Chaouki Abdallah, Gregory Heileman, Ameer Slim	118. Probabilistic Multi-knowledge Transfer in Reinforcement Learning (regular paper) Daniel Fernández, FERNANDO FERNANDEZ, Javier García
	141. Robo-Advising: Enhancing Investment with Inverse Optimization and Deep Reinforcement Learning (regular paper) Haoran Wang, Shi Yu	218. Deep Semi-supervised Learning for Time Series Classification (regular paper) Jann Goschenhofer, Rasmus Hvingelby, David Ruegamer, Janek Thomas, Moritz Wagner, Bernd Bischl	387. AlphaRA: An AlphaZero based approach to Redundancy Analysis (regular paper) Helik Kanti Thacker, Atishay Kumar, Adrita Barari, Damini, Ankit Gupta, Keerthi Kiran

			Jagannathachar, Deokgu Yoon
	<p>288. Robust Collaborative Fraudulent Transaction Detection using Federated Learning (regular paper) Delton M Antony, RAJAN M A, Manoj Apte, Sachin Lodha</p>	<p>260. Estimating the Variance of Return Sequences for Exploration (regular paper) Zerong Xi, Gita Sukthankar</p>	<p>31. Building Action Sets in a Deep Reinforcement Learner (short paper) Yongzhao Wang, Arunesh Sinha, Sky CH-Wang, Michael Wellman</p>
	<p>355. CrypTop12: A Dataset For Cryptocurrency Price Movement Prediction From Tweets And Historical Prices (regular paper) Amish Garg, Tanav Shah, Vinay Kumar Jain, Raksha Sharma</p>	<p>264. Sequence Model-based End-to-End Solar Flare Classification from Multivariate Time Series Data (regular paper) Ali Ahsan muhammad Muzaaheed, Shah Muhammad Hamdi, Soukaina Filali Boubrahimi</p>	<p>308. Multi-Agent Deep Reinforcement Learning for Walker Systems (short paper) Inhee Park, Teng-Sheng Moh</p>
	<p>366. Financial Time Series Forecasting Enriched with Textual Information (regular paper) Steve Ataucuri Cruz, Diego Furtado Silva</p>	<p>301. Aircraft Numerical "Twin": A Time Series Regression Competition (regular paper) Adrien Pavao, Isabelle Guyon, Stéphane Nachar, Fabrice Lebeau, Martin Ghienne, Alaeddine Ben Cheikh, Théo Lecerf et. Al.</p>	<p>449. SoCRATES: System-on-Chip Resource Adaptive Scheduling using Deep Reinforcement Learning (short paper) Tegg Taekyong Sung, Bo Ryu</p>
	<p>467. Temporal Debiasing using Adversarial Loss based GNN Architecture for Crypto Fraud Detection</p>	<p>483. Causal Inference in Non linear Time-series using Deep Networks and Knockoff Counterfactuals (short paper)</p>	<p>154. Predicting Real-time Scientific Experiments Using Transformer models and Reinforcement Learning</p>

	(regular paper) Aditya Singh, Anubhav Gupta, Hardik Wadhwa, Siddhartha Asthana, Ankur Arora	Wasim Ahmad, Maha Shadaydeh Joachim Denzler	(short paper) Juan Manuel Parrilla Gutierrez
	297. Intra-Day Price Simulation with Generative Adversarial Modelling of the Order Flow (short paper) Ye-Sheen Lim, Denise Gorse	421. LCCspm: L-Length Closed Contiguous Sequential Patterns Mining Algorithm to Find Frequent Athlete Movement Patterns from GPS (regular paper) Victor E Adeyemo, Anna Palczewska, Ben Jones	322. Towards Real-World Deployment of Reinforcement Learning for Traffic Signal Control (regular paper) Arthur Müller
	370. Con Connections: Detecting Fraud from Abstracts using Topological Data Analysis (short paper) Sarah J Tymochko, Julien Chaput, Timothy Doster, Emilie Purvine, Jackson Warley, Tegan Emerson	294. Transform-Based Tensor Auto Regression for Multilinear Time Series Forecasting (short paper) Jackson S Cates, Randy C. Hoover, Kyle A Caudle	274. A Data-Efficient Reinforcement Learning Method Based on Local Koopman Operators (short paper) Lixing Song, Junheng Wang, Junhong Xu
	469. Modeling approaches for Silent Attrition prediction in Payment networks (short paper) Lalasa Dheekollu, Hardik Wadhwa, siddharth Vimal, Anubhav Gupta, Siddhartha Asthana, Ankur Arora, Smriti Gupta		

17:45pm- 19:45pm	<i>Feature Extraction and Selection</i> Session Chair: Nikolai Körber, Nikolai.Koerber@haw-landshut.de	<i>ML/DL Applications-II</i> Session Chair: Milad Niknejad, milad3n@gmail.com	<i>Object Detection and Retrieval</i> Session Chair: Jun Chen, junchen@oakland.edu
	464. Feature Subset Selection based on Redundancy Maximized Clusters (regular paper) Md. Hasan, Md. Eusha Kadir, Sadia Sharmin, Abu A Sajib, Amin Ahsan Ali, Mohammad Shoyaib	173. Deep Learning for Morphological Arrhythmia Classification in Encoded ECG Signal (regular paper) Sandeep Mittal, Jack Rothberg, Kanad Ghose	61. Survey of Visual-Semantic Embedding Methods for Zero-Shot Image Retrieval (regular paper) Kazuya Ueki
	302. Fast Tensor Singular Value Decomposition Using the Low-Resolution Features of Tensors (regular paper) Cagri Ozdemir, Randy C. Hoover, Kyle A Caudle	193. Dyadic Sex Composition and Task Classification Using fNIRS Hyperscanning Data (regular paper) Liam A Kruse, Allan Reiss, Mykel J Kochenderfer, Stephanie Balters	410. Assisted Maintenance of Automatic Reclosers with Object Detection through Mobile Devices (regular paper) Francisco Marques Junior, Rodrigo Melo, Alano Pinto, Arthur Bastos, Samira Ribeiro, Ana Goncalves, Flavio Reis
	293. SUPRDAD: A Robust Feature Extractor Better Recognizes Low-Prevalent Retinal Diseases (regular paper) JoonHo Lee, Su Jeong Song	149. Outperforming Clinical Practices in Breast Cancer Detection: A Superior Dense Neural Network in Classification and False Negative Reduction	144. Predicting YOLO Mis-detection by Learning Grid Cell Consensus (regular paper) Bijay Raj Paudel, H B Mudiyansele D

		(short paper) Robert Alphas, Patrick Bujok, Maria Jensen, Steffen M. Larsen	Senarathna, Haibo Wang, Spyros Tragoudas, Yao Hu, Shengbing Jiang
	140. Principal Component Analysis and Entropy-based Keyword Extraction for the Improvement of Bug Triage (short paper) Vaskar R Nath	314. Depression Screening Using Deep Learning on Follow-up Questions in Clinical Interviews (short paper) Ricardo Flores, ML Tlachac, Ermal Toto, Elke A Rundensteiner	405. SuperCaustics: Real-time, open-source simulation of transparent objects for deep learning applications (regular paper) Mehdi Mousavi, Rolando J Estrada
	353. Use of Embedding Spaces for Transferring RobotSkills in Diverse Sensor Settings (short paper) Kazushi Ninomiya	430. Deep Learning Methods for the Prediction of Information Display Type Using Eye Tracking Sequences (short paper) Yuehan Yin, Yahya Alqahtani, Jinjuan Feng, Joyram Chakraborty, Michael P. McGuire	59. From images in the wild video-informed image classification (short paper) Marc r böhlen, Varun Chandola, Wawan Sujarwo, Raunaq Jain
	101. Depression Detection Using Combination of sMRI fMRI Image Features (short paper) Marzieh Mousavian, Jianhua Chen, Steven Greening	436. DeepSplicer: An Improved Method of Splice Sites Prediction using Deep Learning (short paper) Victor Akpokiro, Oluwatosin E Oluwadare, Jugal Kalita	202. Experience feedback using Representation Learning for Few-Shot Object Detection on Aerial Images (short paper) Pierre Le Jeune, Anissa MOKRAOUI, Mustapha Lebbah, Hanane Azzag

	<p>229. Large-Scale Curb Extraction Based on 3D Deep Learning and Iterative Refinement Post-Processing (short Paper)</p> <p>Jan-Christoph Schmitz, Adrian Bauer, Anton Kummert</p>	<p>431. Operationalizing Convolutional Neural Network Architectures for Prohibited Object Detection in X-Ray Imagery (short paper)</p> <p>Thomas W. Webb Neelanjan Bhowmik, Yona Falinie A. Gaus, Toby P Breckon</p>	<p>310. FOD-A: Foreign Object Debris in Airports (short paper)</p> <p>Travis J Munyer, Pei-chi Huang, Chenyu Huang, Omaha, Xin Zhong</p>
	<p>219. Tiny Generative Image Compression for Bandwidth-Constrained Sensor Applications (short paper)</p> <p>Nikolai Körber</p>	<p>398. Attention on classification for fire segmentation (regular paper)</p> <p>Milad Niknejad, Alexandre Bernardino</p>	
	<p>246. Identification and validation of a radiomic signature for predicting survival outcomes in non-small-cell lung cancer treated with radiation therapy (regular paper)</p> <p>Jin Li, Yixin Liu, Jingquan Wu</p>	<p>171. Purrai: A Deep Neural Network based Approach to Interpret Domestic Cat Language (regular paper)</p> <p>Weilin Sun</p>	

Tuesday December 14th: Main Conference

9:00am- 10:15am	<p>Keynote Talk</p> <p>Speaker: Prof. Yiren Chen, Duke University</p> <p>Title: Efficient and Reliable Deep Learning at Scale</p>		
10:30am- 12:45pm	<p><i>Recurrent Networks</i></p> <p>Session Chair: Sheldon Schiffer, schiffer@gsu.edu</p>	<p><i>Classification</i></p> <p>Session Chair: Jeremiah W Johnson, jwj2@unh.edu</p>	<p><i>Deep Adversarial Networks-II</i></p> <p>Session Chair: Divya Sardana, dvy.sardana@gmail.com</p>
	<p>307. Efficient Deep Learning of Nonlinear Fiber-Optic Communications Using a Convolutional Recurrent Neural Network</p> <p>(regular paper)</p> <p>Abtin Shahkarami, Mansoor Yousefi, Yves Jaouen</p>	<p>29. Applications of Mobile Machine Learning in Detecting Flowers of Bioenergy Crops</p> <p>(regular paper)</p> <p>Wenjun Zeng, Bakhtiar Amen</p>	<p>447. Multiple Imputation via Generative Adversarial Network for High-dimensional Blockwise Missing Value Problems</p> <p>(regular paper)</p> <p>Zongyu Dai, Zhiqi Bu, Qi Long</p>
	<p>189. Game Character Facial Animation using Actor Video Corpus and Recurrent Neural Networks</p> <p>(regular paper)</p> <p>Sheldon Schiffer</p>	<p>70. Influence of Training Data on the Invertability of Neural Networks for Handwritten Digit Recognition</p> <p>(regular paper)</p> <p>Antonia Adler, Michaela Geierhos, Eleanor U Hobley</p>	<p>450. Resiliency of SNN on Black-Box Adversarial Attacks</p> <p>(regular paper)</p> <p>Bijay Raj Paudel, Aashish Itani, Spyros Tragoudas</p>

	<p>91. Modeling and Predicting Online Learning Activities of Students: An HMM-LSTM based Hybrid Approach (short paper) Alexis Amezaga, Omair Shafiq</p>	<p>105. MLCHECK– Property-Driven Testing of Machine Learning Classifiers (regular paper) Arnab Sharma, Caglar Demir, Axel Ngonga, Heike Wehrheim</p>	<p>409. Detecting Information Theft Attacks in the Bot-IoT Dataset (short paper) Joffrey Leevy, John Hancock, Taghi Khoshgoftaar, Jared Peterson</p>
	<p>424. Continuous Multimodal Emotion Prediction based on Recurrent Neural Network Variants with Attention Model (short paper) Yona Falinie A. Gaus, Toby P Breckon, Joyal Raju</p>	<p>131. Instance-based Label Smoothing For Better Calibrated Classification Networks (regular paper) Mohamed Maher, Meelis Kull</p>	<p>371. Evolutionary Adversarial Attacks on Payment Systems (short paper) Nishant Kumar, siddharth Vimal, Kanishka Kayathwal, Gaurav Dhama</p>
	<p>95. PermeabilityNets: Comparing Neural Network Architectures on a Sequence-to-Instance Task in CFRP Manufacturing (short paper) Simon Stieber, Niklas Schröter, Ewald Fauster, Alexander Schiendorfer, Wolfgang Reif</p>	<p>119. ConfusionTree- Pattern: A Hierarchical Design for an Efficient and Performant Multi-Class Pattern (short paper) Michele Franco Adesso, Nicola Wolpert, Elmar Schömer</p>	<p>321. Perceptually Constrained Fast Adversarial Audio Attacks (short paper) Jason Hnery, Mehmet Ergezer, Marko Orescanin</p>
	<p>452. Proxy Model Explanations for Time Series RNNs</p>	<p>243. Detecting SSH and FTP Brute Force Attacks in Big Data</p>	<p>245. GAN Based Approach for Drug Design (short paper)</p>

	(short paper) Zach Wood-Doughty, Isabel A Cachola, Mark Dredze	(short paper) John Hancock, Taghi Khoshgoftaar, Joffrey Leevy	Anusha S Rao, Sanjana Moudgalya, Aninditha Ramesh, Srinivas K S
	468. Bidirectional Backpropagation for High-Capacity Blocking Networks (short paper) Bart Kosko, Olaoluwa A Adigun	393. CurL-AutoML: Curriculum Learning-based AutoML (short paper) Lucas Silva, Lucas Silva Fernando R Zagatti, Bruno Sette, Helena Caseli, Daniel Lucrédio, Diego Furtado Silva	200. EVALUATION OF GAN ARCHITECTURES FOR VISUALISATION OF HPV VIRUSES FROM MICROSCOPIC IMAGES (short paper) Xiaohong W Gao, Xuesong Wen
	388. Predicting Cognitive Load using Parameter-optimized CNN from Spatial-Spectral Representation of EEG Recordings (short paper) Felix Havugimana, mohammed A Bany Muhammad, Ashraf Moinuddin, Mohammed Yeasin	254. A Contrastive Learning Approach to Auroral Identification and Classification (short paper) Jeremiah W Johnson	185. Regularized Sequential Latent Variable Models with Adversarial Neural Networks (short paper) Jin Huang, Ming Xiao
	133. Ensembles of Long Short-Term Memory Experts for Streaming Data with Sudden Concept Drift	422. Homogeneous Transfer Active Learning for Time Series Classification	155. Impact of reverberation through deep neural networks on adversarial perturbations (short paper) Romain Cohendet, Miguel

	(short paper) Sabine Apfeld, Alexander Charlish, Gerd Ascheid	(regular paper) Patrick Kinyua, Jouandeau Nicolas	Solinas, Rémi Bernhard, Marina Reyboz, Pierre-Alain Moellic, Yannick Bourrier, Martial Mermillod
		349. Cloud Failure Prediction with Hierarchical Temporary Memory: An Empirical Assessment (regular paper) Oliviero Riganelli, Paolo Saltarel, Alessandro Tundo, Marco Mobilio, Leonardo Mariani	
1:00pm-15:10pm	<i>ML/DL Applications-III</i> Session Chair: Xiao Zhou, zhouxiao@bu.edu	<i>Graph Based Methods</i> Session Chair: Dominik Dold, dodo.science@web.de Co-Chair: Srividya K Bansal, Srividya.Bansal@asu.edu	<i>Convolutional Neural Networks</i> Session Chair: Jundong Liu, jundong.liu@gmail.com
	209. Semantic segmentation of multi-channel polycrystalline structure (regular paper) Andreas Selmaier, Benjamin Lutz, Dominik Kißkalt, Simon	295. Neighborhood Random Walk Graph Sampling for Regularized Bayesian Graph Convolutional Neural Networks	358. Pruned Genetic-NAS on GPU Accelerator Platforms with Chaos-on-Edge Hyperparameters

	Boernicke, Jens Fuerst, Jörg Franke	(regular paper) Aneesh Komanduri, Justin Zhan	(regular paper) Anand Ravishankar, Santhi Natarajan, Bharathi Malakreddy
	266. Sketch2Vis: Generating Data Visualizations from Hand-drawn Sketches with Deep Learning (regular paper) Zhongwei Teng, Quchen Fu, Jules White, Douglas Schmidt	440. A Graph-Based Spatial Cross-Validation Approach for Assessing Models Learned with Selected Features to Understand Election Results (regular paper) Tiago Pinho da Silva, Antonio R S Parmezan, Gustavo Batista	157. Should You Go Deeper? Optimizing Convolutional Neural Network Architectures without Training (regular paper) Mats L Richter, Julius Schöning, Anna Wiedenroth, Ulf Krumnack
	280. SwiftLane: Towards Fast and Efficient Lane Detection (regular paper) Oshada Jayasinghe, Damith Kawshan Anhettigama, Avandra S. Hemachandra, Shenali A Kariyawasam, Ranga Rodrigo, Peshala Jayasekara	287. An energy-based model for neuro-symbolic reasoning on knowledge graphs (regular paper) Dominik Dold, Josep Soler Garrido	268. Elastic distributed training with fast convergence and efficient resource utilization (regular paper) Guojing Cong
	352. Contextual road lane and symbol generation for autonomous driving (regular paper) Pratik pradip Padamwar, Ajay Soni, Krishna Reddy Konda	283. One Node at a Time: Node-Level Network Classification (regular paper) Saray Shai, Isaac Jacobs, Peter Mucha	201. Dynamically Adapting Floating-Point Precision to Accelerate Deep Neural Network Training (regular paper) John H Osorio Ríos, Adrià

			Armejach, Eric Petit, Greg Henry, Marc Casas Guix
	<p>446. Data-Driven State of Charge Estimation of Li-ion Batteries using Supervised Machine Learning Methods (regular paper) Yichun Li, Mina Maleki, Shadi Banitaan, Mingzuoyang Chen</p>	<p>127. Homology Preserving Graph Compression (short paper) Mehmet Aktas, Thu Nguyen, Esra Akbas</p>	<p>417. Improved CNN classification accuracy with the addition of shallow cascading CNNs (short paper) Vasileios Pentsos, Bijay Raj Paudel, Spyros Tragoudas, Kiriti Nagesh Gowda, Mike Schmit</p>
	<p>126. Dynamic Adjustment of Concurrent Neural Networks within Limited Power Thermal Constraints in Autonomous Driving (regular paper) Hee jun Park, Abhinav Goel</p>	<p>432. Connection Management xAPP for O-RAN RIC: A Graph Neural Network and Reinforcement Learning Approach (short paper) ONER ORHAN, Vasuki Narasimha Swamy, Thomas Tetzlaff, Marcel Nassar, Hosein Nikopour, Shilpa Talwar</p>	<p>249. Boosting the Intelligibility of Waveform Speech Enhancement Networks through Self-supervised Representations (regular paper) Tao Sun, Shuyu Gong, Zhewei Wang, Charles Smith, Xianhui Wang, Li Xu, Jundong Liu</p>
	<p>337. Super Resolution with Sparse Gradient-Guided Attention for Suppressing Structural Distortion (regular paper) Geonhak Song, Tien-Dzung Nguyen, Junghyun Bum, Hwijong Yi, Chang-Hwan Son, Hyunseung Choo</p>	<p>482. OntoConnect: Domain-Agnostic Ontology Alignment using Graph Embedding with Negative Sampling (short paper) Jaydeep Chakraborty, Mohamed A. Sherif,</p>	<p>238. Efficient and Versatile Auto-Channel Size Optimization for CNNs (short paper) Mahdi S Hosseini, Yi Ru Wang, Samir Khaki, Weihang Zheng, Konstantinos N Plataniotis</p>

		Hamada Zahera, Srividya K Bansal	
	158. Assessment of Neural Networks for Stream-Water-Temperature Prediction (short paper) Stefanie Mohr, Konstantina Drainas, Jürgen Geist	451. Graph Convolutional Networks for Categorizing Online Harassment on Twitter (short paper) Mozhgan saeidi, Evangelos Milios, Norbert Zeh	55. Trajectory growth lower bounds for random sparse deep ReLU networks (short paper) Ilan Price, Jared Tanner
	318. Voting Heterogeneous Ensemble for Code Smell Detection (short paper) Hamoud Aljamaan	361. Visual Question Answering based on Formal Logic (regular paper) Muralikrishna Guruswamy Sethuraman, Ali Payani, Faramarz Fekri, James C Kerce	272. Local Geometry Preserving Deep Networks For Featurizing High-Dimensional Datasets (regular paper) Walter Gerych, Jessica Bader, Declan Nelson, Thalia Chai-Zhang, Luke J Buquicchio, Abdulaziz Alajaji, Kavin Chandrasekaran, Emmanuel Agu, Elke A Rundensteiner
15:15pm-17:15pm	<i>ML/DL Applications-IV</i> Session Chair: Suby A Singh, ssz389@uregina.ca	<i>Encoders/ Representation Learning</i> Session Chair: Tyler Cody, tcody@vt.edu	<i>Special Session on Federated Learning and Meta Learning</i> Session Chair: M. Hadi Amini, amini@cs.fiu.edu
	416. Towards Sequential Multivariate Fault Prediction for Vehicular Predictive Maintenance	163. Multimodal Variational Autoencoders for Sensor Fusion and Cross Generation	343. Human Activity Recognition Using Federated Graph Neural Network (regular paper)

	(regular paper) Abdul Basit Hafeez, Eduardo Alonso, Aram Ter-Sarkisov	(regular paper) Matthieu Da Silva, Andrea Ancora, Maurizio Filippone, Pietro Michiardi	Abhishek Sarkar, ASHIS K ROY
	167. Curriculum Learning to Handle Extreme Class Imbalance for Acoustic Modeling of Forest Elephant Calls (regular paper) Jonathan M Gomes-Selman, Nikita Demir, Peter Wrege, Andreas Paepcke	198. Auto Encoder Based Image Inpainting Model Using Multi Layer Latent Representations (regular paper) Namalie Walgampaya, Nihal Kodikara, Pradeepa Samarasinghe	458. Federated fuzzy learning with imbalanced data (regular paper) Lukas J Dust, Marina López Murcia, Andreas Mäkilä, Petter Nordin, Ning Xiong
	175. Pneumonia Detection with Game-theoretic Rough Sets (regular paper) Suby A Singh	232. Distance Ordering : A Deep Supervised Metric Learning for Pain Intensity Estimation (short paper) Ting Jie, Yi-Cheng Yang, Li-Chen Fu	501. OptABC: an Optimal Hyperparameter Tuning Approach for Machine Learning Algorithms (regular paper) Leila Zahedi, Farid Ghareh Mohammadi, M. Hadi Amini
	220. Deployment of Embedded Edge-AI for Wildlife Monitoring in Remote Regions (regular paper) Daniel Schwartz, Jonathan M Gomes-Selman, Peter Wrege, Andreas Paepcke	259. Deep Metric Learning for Code Authorship Attribution and Verification (short paper) Riley White, Nathan Sprague	547. Federated Deep Learning for Heterogeneous Edge Computing (regular paper) Khandaker Mamun Ahmed, Ahmed Imteaj, M. Hadi Amini
	340. A User-Centered Recommender System and Simulation Model	289. Efficient Data Compression for 3D Sparse TPC via	516. Incremental Learning Vector Auto Regression for

	(regular paper) Rania Islambouli, Sandy Ingram, Denis Gillet	Bicephalous Convolutional Autoencoder (short paper) Yi Huang, Yihui (Ray) Ren, Shinjae Yoo, Jin Huang	Forecasting with Edge Devices (regular paper) Venkata Pesala, Topon Paul, Ken Ueno, Praneeth Bugata, Ankit Kesarwani
	383. Theory for Deep Learning Regression Ensembles with Application to Raman Spectroscopy Analysis (regular paper) Wenjing Li, Randy Paffenroth, Michael T Timko, Matthew P Rando, Avery Brown, Nathaniel A Deskins	439. Trade-offs in Metric Learning for Bearing Fault Diagnosis (short paper) Tyler Cody, Stephen Adams, Peter Beling	536. Data Driven football scouting assistance with simulated player performance extrapolation (regular paper) Sayali Patil, Shantanu Ghar, Venkatesh Arunachalam
	16. Optimizing Multi-Stage Hydraulic Fracturing Treatments for Economical Production in Permian Basin Using Machine Learning (short paper) Yanfang Wang, Jianhua Chen, Seung Ihl Kam, Anqi Bao	303. In Search of Probeable Generalization Measures (short paper) Mahdi S Hosseini, Jonathan Jaegerman, Khalil Damouni, Konstantinos N Plataniotis	537. Active Learning to Support In-situ Process Monitoring in Additive Manufacturing (regular paper) Siva Krishna Dasari, Abbas Cheddad, Lars Lundberg, Jonatan Palmquist
	211. Counter-factual Analysis of On-Line Math Tutoring Impact on Low-income High School Students (short paper)	253. LIDSNet: A Lightweight on-device Intent Detection model using Deep Siamese Network	543. Federated Fine-Tuning Performance on Edge Devices (regular paper)

	Maheer Alhossaini, Mohammed Aloqeely	(short paper) Vibhav Agarwal, Sudeep Deepak Shivnikar, Sourav Ghosh, Himanshu Arora, Yashwant Singh Saini	Marko Orescanin, Mehmet Ergezer, Gurminder Singh, Matthew Baxter
		256. Argue to Learn: Accelerated Argumentation-Based Learning (short paper) Hamed Ayoobi, ming cao, Rineke Verbrugge, Bart Verheij	
5:20pm-6:50pm	<i>Machine Learning Methods</i> Session Chair: Maya Kapoor, mkapoor1@uncc.edu	<i>Attention Networks</i> Session Chair: Guimin Dong, gd5ss@virginia.edu	<i>Anomaly Detection and Clustering II</i> Session Chair: Praveen Ramesh, praveenkumarramesh@ieee.org
	362. Robust Thresholding Strategies for Highly-Imbalanced and Noisy Data (regular paper) Justin Johnson, Taghi Khoshgoftaar	251. Semi-supervised Graph Instance Transformer for Mental Health Inference (regular paper) Guimin Dong, Mingyue Tang, Lee Lihua Cai, Laura E Barnes, Mehdi Boukhechba	413. Video Anomaly Detection Using Dual Discriminator Based Generative Adversarial Network (regular paper) Jiaqi Xu, Zhenjiang Miao, Wanru Xu, Qiang Zhang, Jiayi Wang, Shaoyue Song

	<p>463. Harnessing expressive capacity of Machine Learning modeling to represent complex coupling of Earth's auroral space weather regimes (regular paper) Jack Ziegler, Ryan McGranaghan</p>	<p>258. Leveraging Transformers for StarCraft Macromanagement Prediction (short paper) Muhammad Junaid J Khan, Shah hassan, Gita Sukthankar</p>	<p>162. A Validation Framework for ARP Similarity Measure (regular paper) SERGIU LIMBOI, MARA DEAC-PETRUSEL</p>
	<p>396. MetaPrep: Data preparation pipelines recommendation via meta-learning (regular paper) Fernando R Zagatti, Lucas Silva, Lucas Silva, Bruno Sette, Helena Caseli, Daniel Lucrédio, Diego Furtado Silva</p>	<p>43. Transformer Based Bengali Chatbot Using General Knowledge Dataset (short paper) Abu Kaisar Mohammad Masum, Nushrat Jahan Ria Sheikh Abujar</p>	<p>344. How Dense Autoencoders can still Achieve theState-of-the-art in Time-Series Anomaly Detection (short paper) Louis Jensen, Sang Chin, Jayme Fosa, Ben Teitelbaum</p>
	<p>231. Active Learning of Markov Decision Processes using Baum-Welch algorithm (short paper) Raphaël Reynouard, Giovanni Bacci, Kim Larsen, Anna Ingólfssdóttir</p>	<p>199. Medical Code Prediction from Discharge Summary: Document to Sequence BERT using Sequence Attention (regular paper) Tak-Sung Heo, Yongmin Yoo, YeongJoon Park, ByeongCheol Jo, Kyungsun Kim</p>	<p>299. Conversation Clustering Adaptation for Intent Recognition (regular paper) Michał Lew, Aleksander Obuchowski, Emilia Kacprzak, Agnieszka Pluwak</p>
	<p>415. Maximizing University Enrollment Using</p>	<p>269. A Transformer-based Approach for TranslatingNatural</p>	<p>286. Analyzing and Improving the Robustness of</p>

	<p>Institutional-Based Aid Scholarship (short paper) Ahmad Slim, Don Rhea, Tushar Ojha, Georges El-Howayek, Chaouki Abdallah, Terry Babbitt</p>	<p>Language to Bash Commands (short paper) Quchen Fu, Zhongwei Teng, Jules White, Douglas Schmidt</p>	<p>Tabular Classifiers using Counterfactual Explanations (regular paper) Peyman Rasouli, Ingrid Chieh Yu</p>
	<p>235. Integrating Active Learning and Machine Teaching for Online Learning: A Study of Labelling Effort and User Attention (short paper) Agnes Tegen, Paul Davidsson, Jan A Persson</p>	<p>384. Towards Intelligent Reading through Multimodal and Contextualized Word LookUp (short paper) Ilmi Yoon swetha Govindu, Raviteja V Guttula, Swati Kohli, Poonam Patil, Anagha Kulkarni</p>	<p>404. An Unsupervised Learning Methodology for Increasing Human Productivity via VR Training (short paper) Sergio D Viademonte</p>
		<p>453. Sentiment Analysis of StockTwits Using Transformer Models (regular paper) Aysun Bozanta, Sabrina Angco, Mucahit Cevik, Ayse Bener</p>	

Wednesday December 15th

9:00am-10:15am	Keynote Talk-3 Speaker: Prof. Sorin Draghici, Wayne State University Title: Using graph methods to understand diseases and repurpose drugs		
10:30am-12:30pm	<i>Special Session: Machine Learning in Health</i> Session Chair: Carmela Comito, carmela.comito@icar.cnr.it	<i>Special Session: Machine Learning for Predictive Models in Engineering Applications-I</i> Session Chair: Ali Bou Nassif, anassif@sharjah.ac.ae	<i>Special Session: Deep Learning-I</i> Session Chair: Arif Wani, awani@uok.edu.in
	523. An HMM-ensemble approach to predict severity progression of ICU treatment for hospitalized COVID-19 patients (regular paper) federica mandreoli, Federico Motta, Paolo Missier	515. Deep Learning Applied on Renewable Energy Forecasting Towards Supply-Demand Matching (regular paper) Abdulaziz Almalaq	325. Towards building a robust large-scale Bangla OCR solution using a unique multiple-domain character-based document recognition approach (regular paper) AKM Shahariar Azad Rabby, Majedul Islam, Zahidul Islam, Nazmul Hasan, Fuad Rahman
	406. Conformal Wearable for Quantification of Dorsiflexion for a Hemiplegic Ankle Pair with	168. Data-driven and Automatic Surface Texture Analysis Using Persistent Homology	372. Temporal Bottleneck Attention for Video Recognition

	<p>Distinction by Machine Learning (regular paper) Robert LeMoyne, Timothy Mastroianni</p>	<p>(regular paper) Melih C Yesilli, Firas Khasawneh</p>	<p>(regular paper) Schubert R Carvalho, Nicolas Bertognolli, Tyler Folkman</p>
	<p>500. EMU: Early Mental Health Uncovering Framework and Dataset (regular paper) ML Tlachac, Ermal Toto, Joshua Lovering, Rimsha Kayastha, Nina Taurich, Elke A Rundensteiner</p>	<p>180. ORSA: Outlier Robust Stacked Aggregation for Best- and Worst-Case Approximations of Ensemble Systems (regular paper) Peter Domanski, Dirk Pflüger, Raphaël N Latty, Jochen Rivoir</p>	<p>470. Deeper Neural Networks with Non-Vanishing Logistic Hidden Units: NoVa vs. ReLU neurons (regular paper) Bart Kosko, Olaoluwa A. Adigun</p>
	<p>502. COVID-CBR: A deep learning architecture featuring case-based reasoning for classification of COVID-19 from chest x-ray images (regular paper) Xiaohong W Gao, Alice Gao</p>	<p>347. Verifying the Applicability of Synthetic Image Generation for Object Detection in Industrial Quality Inspection (regular paper) Majid Shirazi, Markus Schmitz, Georgij Safronov, Simon Janssen, Anabelle Thies, Amr Rizk, Peter Mayr, Philipp Engelhardt</p>	<p>532. Using Generative Adversarial Networks and Non-Roadside Video Data to Generate Pedestrian Crossing Scenarios (regular paper) James P. Spooner, Vasile Palade, Alireza Daneshkhah, Stratis Kanarachos</p>

	<p>524. Classifying Challenging Behaviors in Autism Spectrum Disorder with Word Embeddings (regular paper) Abigail Atchison, Gabriela Pinto, Ali Woodward, Elizabeth Stevens, Dennis Dixon, Erik Linstead</p>	<p>471. Shapelets-based Data Augmentation for Time Series Classification (regular paper) Peiyu Li, Soukaina Filali Boubrahimi, Shah Muhammad Hamdi</p>	<p>493. Alternate Model Growth and Pruning for Efficient Training of Recommendation Systems (regular paper) Xiaocong Du, Bhargav Bhushanam, Jiecao Yu, Dhruv Choudhary, Tianxiang Gao, Sherman Wong, Louis Feng, Jongsoo Park, Yu Cao, Arun Kejariwal</p>
	<p>520. Effects of COVID-19 on individuals in Opioid Addiction Recovery (regular paper) Khaled Mohammed Saifuddin, Esra Akbas, Jason Beaman, Max Khanov</p>	<p>497. Machine Learning Model Update Strategies for Hard Disk Drive Failure Prediction (regular paper) Marwin Züfle, Florian Erhard, Samuel Kounev</p>	<p>495. Learn to Trace Odors: Autonomous Odor Source Localization via Deep Learning Methods (regular paper) Lingxiao Wang, Shuo Pang, Jinlong Li</p>
	<p>509. Automated Machine Learning Strategies to Damage Identification of Neurofibromatosis Mutations (short paper) Alvaro David Orjuela-Cañón</p>	<p>513. Deep Neural Networks for Detecting Asteroids in the ATLAS Data Pipeline (regular paper) Noah P Kaplan, Rohan Loveland</p>	<p>527. PrunedCaps: A case for Primary Capsules Discrimination (regular paper) Ramin Sharifi, Pouya Shiri, Amirali Baniasadi</p>

12:45pm-3:30pm	<p><i>Special Session: Machine Learning in Health-II</i> Session Chair: Carmela Comito, carmela.comito@icar.cnr.it</p>	<p><i>Special Session: Machine Learning for Predictive Models in Engineering Applications-II</i> Session Chair: Shadi Banitaan, banitash@udmercy.edu</p>	<p><i>Special Session on Machine Learning for Natural Language Processing</i> Session Chair: Rim Hantach, rim.hantach@external.engie.com</p>
	<p>545. A Machine Learning Approach for Predicting Deterioration in Alzheimer's Disease Musto (regular paper) Henry T Musto, Daniel Stamate, Ida Pu, Daniel Stahl</p>	<p>517. Condition Monitoring for Power Converters via Deep One-Class Classification (regular paper) Nikola Markovic, Daniel Vahle, Volker Staudt, Dorothea Kolossa</p>	<p>267. Aspect Oriented Suggestion Extraction from Online Reviews (regular paper) Tharushi K Jayasekara, A.R. Weerasinghe, Viraj Welgama</p>
	<p>546. Towards Understanding the Psychological Effects of the COVID-19 Pandemic on the Indian Population (regular paper) Pranav Khurana, Deepanshu Pandey, Ashwin Misra</p>	<p>518. Understanding Traffic Cruising Causation Via Parking Data Enhancement (regular paper) Mirza Jasarevic, Veselka Boeva, Fredrik Sjölin, Per-Olav Gramstad</p>	<p>395. A proposal to identify stakeholders from news for the institutional relationship management activities of an institution based on Name Entity Recognition using BERT (regular paper) Marcos Paulo P Silva, Eric Hans M Silva, João Laterza, Marcelo Ladeira</p>
	<p>552. Data Augmentation and CNN Classification For Automatic COVID-19</p>	<p>522. Auto-encoder LSTM for Li-ion SOH prediction : a comparative study on</p>	<p>382. Semantics Improvement in Vietnamese Poetry Generation (regular paper)</p>

	<p>Diagnosis From CT-Scan Images On Small Dataset (regular paper) Weijun Tan, Hongwei Guo</p>	<p>various benchmark datasets (regular paper) Paul Audin, Inès JORGE, Ahmed Samet, Tedjani Mesbahi, François De Bertrand De Beuvron, Romuald Boné</p>	<p>Tuan Thanh Nguyen</p>
	<p>554. Decoder Transformer for Time Series Embedded Health Outcome Predictions (regular paper) Omar Boursalie, Reza Samavi, Thomas Doyle</p>	<p>526. Deep Learning for Range Localization via Over-Water Electromagnetic Signals (regular paper) Evan C Witz, Maria Barger, Randy Paffenroth</p>	<p>401. Detecting Offensive Content on Twitter During Proud Boys Riots (regular paper) Swapna Gokhale</p>
	<p>125. Text Mining Approach to Predict Non-Adherence (short paper) Yufan Wang, Mahsa Mohaghegh</p>	<p>539. Catch Weight Prediction for Multi-Species Fishing using Artificial Neural Networks (regular paper) Tianbai Chen, Li Zhong, Naweiluo Zhou, Dennis Hoppe</p>	<p>462. AuTGeLy: Automatic Title Generator based on Song Lyrics Extractions (regular paper) Diego Vallejo-Huanga, Esteban Carrera, Jonathan Mañay</p>

	<p>170. Explainable Zero-shot Modeling of Clinical Depression Symptoms from Text (short paper) Nawshad Farruque, Randy Goebel, Osmar Zaiane, Sudhakar Sivapalan</p>	<p>549. Size Does Matter: Overcoming Limitations during Training when using a Feature Pyramid Network (regular paper) Fabian Fallas-Moya, Manfred Gonzalez-Hernandez, Amir Sadovnik</p>	<p>472. Hashtags: an essential aspect of topic modeling of city events through social media (regular paper) Mikhail A Ковальчук, Denis Nasonov</p>
	<p>244. A Deep Learning-based Approach for Real-time Facemask Detection (short paper) Wadii Boulila, Ayyub Alzahem, Maha Driss, Aseel Almoudi, Muhanad Afifi, Ibrahim Alturki</p>		<p>533. CVSS-BERT: Explainable Natural Language Processing to Determine the Severity of a Computer Security Vulnerability from its Description (regular paper)Mustafizur R Shahid, Hervé Debar</p>
	<p>257. Learning from Limited Data for Speech-based Traumatic Brain Injury (TBI) Detection (short paper) Apiwat Ditthapron, Emmanuel Agu, Adam Lammert</p>		<p>564 - An Augmented Image Captioning Model: Incorporating Hierarchical Image Information (regular paper) Nathan Funckes Greg Wolffe</p>

	<p>512. Automated Machine Learning Strategies to Damage Identification of Neurofibromatosis Mutations (short paper) Carmine T Guida, Ming Zhang, Jordan Blackadar, Zilong Yang, Jeffrey Driban, Jeffrey Duryea, Lena Schaefer, Charles Eaton, Timothy McAlindon, Juan Shan</p>		<p>565 - Improving Next-Application Prediction with Deep Personalized-Attention Neural Network (regular paper)Jun ZHU, Gautier Viaud, Céline Hudelot</p>
	<p>512. Automated Hand Osteoarthritis Classification Using Convolutional Neural Networks (short paper) Carmine T Guida, Ming Zhang, Jordan Blackadar, Zilong Yang, Jeffrey Driban, Jeffrey Duryea, Lena Schaefer, Charles Eaton, Timothy McAlindon, Juan Shan</p>		<p>567 - A study of the plausibility of attention between RNN encoders in natural language inference (regular paper) Duc Hau NGUYEN, Guillaume Gravier, Pascale Sébillot (INSA Rennes, IRISA</p>
	<p>528. BP-Net: Efficient Deep Learning for Continuous Arterial Blood Pressure</p>		<p>568 - Automating Questions and Answers of Good and Services Tax system using</p>

	<p>Estimation using Photoplethysmogram (short paper) Rishi Vardhan K, Vedanth Subramaniam, Poojah G, ABHISHEK K, Nitish Kumar M, Vineeth Vijayaraghavan</p>		<p>clustering and embeddings of queries (regular paper) Chandra B., pankaj Dixit</p>
	<p>529. End-to-End Optimized Arrhythmia Detection Pipeline using Machine Learning for Ultra-Edge Devices (short paper) ShanthaKumar S, Sachin Krishan T, Vishal Nagarajan, Sideshwar J B, Vineeth Vijayaraghavan</p>		
	<p>538. Learning Medical Risk Scores for Pediatric Appendicitis (short paper) Pedro Roig Aparicio, Ričards Marcinkevičs, Patricia Reis Wolfertstetter, Sven Wellmann, Christian Knorr, Julia Vogt</p>		

3:45pm-5:45pm	<p><i>Special Session: Machine Learning Surrogate Models in Science and Engineering</i></p> <p>Chair: Farhad Pourkamali-Anaraki, farhad_pourkamali@uml.edu</p>	<p><i>Special Session on ML for Graphs</i></p> <p>Session Chair: Arunkumar Bagavathi, abagava@okstate.edu</p>	<p><i>Special Session: Deep Learning-II</i></p> <p>Session Chair: Arif Wani awani@uok.edu.in</p>
	<p>544. A Physics-Informed Graph Attention-based Approach for Power Flow Analysis (regular paper) Ashkan B Jeddi, Abdollah Shafieezadeh</p>	<p>540. Learning Mathematical Relations Using Deep Tree Models (regular paper) Sebastian Wankerl, Andrzej Dulny, Gerhard Götz, Andreas Hotho</p>	<p>551. Prov-GEM: Automated System Provenance Analysis through Graph Embeddings (regular paper) Maya Kapoor, Joshua Melton, Michael Ridenhour, Siddharth Krishnan, Thomas M. Moyer</p>
	<p>506. Data-driven Support Recovery for Sparse Signals with Non-stationary Modulation (regular paper) Youye Xie, Michael Wakin, Gongguo Tang</p>	<p>556. Influential nodes detection in complex networks via diffusion Frechet function (regular paper) Mehmet Aktas, Sidra Jawaid, Ebony Harrington, Esra Akbas</p>	<p>553. ROWBACK: ROBust Watermarking for neural networks using BACKdoors (regular paper) Nandish Chattopahyay, Anupam Chattopdhyay</p>
	<p>507. Practical Active Learning with Model Selection for Small Data (regular paper)</p>	<p>566. BuiltNet: Graph based Spatio-Temporal Indoor Thermal Variation (regular paper) Naima Khan, Nirmalya Roy</p>	<p>381. Anomaly Detection of actual IoT traffic flows through Deep Learning (short paper)</p>

	Maryam Pardakhti, Nila Mandal, Anson W. K. Ma, Qian Yang		Lerina Aversano, Mario Luca Bernardi, Marta Cimitile, Riccardo Pecori
	511. Surrogate Ground Truth Generation to Enhance Binary Fairness Evaluation in Uplift Modeling (regular paper) Filip Michalsky, Serdar Kadioglu	559. Improve Learner-based Recommender System with Learner's Mood in Online Learning Platform (regular paper) Qing TANG, Marie-Hélène ABEL, Elsa NEGRE	414. Bank transactions embeddings help to uncover current macroeconomics (short paper) Maria Begicheva, Oleg I. Travkin, Alexey Zaytsev
	531. Voxel-based Deep Learning for Image Super-resolution of Areal Density Maps of Carbon-nanotube Sheets (regular paper) Yingnan Liu, Randy Paffenroth	558. Mood detection ontology integration with teacher context (regular paper) Nader N. Nashed	473. Mixed Spatio-Temporal Neural Networks on Real-time Prediction of Crimes (short paper) Xiao Zhou, Xiao Wang, Gavin Brown, Chengchen Wang, Sang Chin
	534. Learning Free-Surface Flow with Physics-Informed Neural Networks (regular paper) Raphael Leiteritz, Marcel Hurler, Dirk Pflüger		474. Kernel Factorisation Machines (short paper) Francois Buet-Golfouse, Islam Utyagulov
	542. An Empirical Evaluation of the t-SNE		541. Critical State Detection for Adversarial Attacks in

	<p>Algorithm for Data Visualization in Structural Engineering (regular paper) Parisa Hajibabae, Farhad Pourkamali-Anaraki, Mohammad Amin Hariri-Ardebili</p>		<p>Deep Reinforcement Learning (short paper) Praveen Kumar Ramesh, Niranjana Kumar Ilampooranan, Mohan Vamsi Adluru, Sujith Sivasankaran, Vineeth Vijayaraghavan</p>
			<p>525. LE-CapsNet: A Light and Enhanced Capsule Network (short paper) Pouya Shiri, Amirali Baniasadi</p>
			<p>570. Assessing Eurosystem Policy Rules By Deep Learning Approach (short paper) A. D. Amar, Januj Juneja</p>