

19th IBCAST 2022: ARTIFICIAL INTELLIGENCE AND SOFTWARE TECHNOLOGIES

16-20 August 2022

Technical Program

	0900-1030		1100-1230		1400 – 1530		1600 – 1730											
Day-1 August 16, 2022 Tuesday	Opening Remarks			L U N C H	Session 1.1		Session 1.2											
					Dr. Maizatul Akmar Binti Ismail <i>Universiti Malaya, Malaysia</i>	Dr. M. Shafique <i>NYU Abu Dhabi, UAE/ TU Wien, Austria</i>	Dr. Faiza <i>Netherland</i>	AI-ST-566	AI-ST-741	AI-ST-644								
Day-2 August 17, 2022 Wednesday	Session 2.1 (Applied AI)		Session 2.2			Session 2.3			Session 2.4									
	Dr. Naveed Sherwani <i>Silicon Federation, USA</i>	Dr. Shoab Ahmed Khan <i>CARE PVT LTD, PK</i>	Dr. Syed Afaq Ali Shah <i>Australia</i>	AI-ST-834	AI-ST-31	AI-ST-839	AI-ST-601	AI-ST-138	AI-ST-801	AI-ST-77	AI-ST-467	AI-ST-526	Dr. Halit Oguztuzun <i>Turkey</i>	AI-ST-537	AI-ST-72	AI-ST-298		
Day-3 August 18, 2022 Thursday	Session 3.1			Session 3.2			Session 3.3			Session 3.4								
	AI-ST-309	AI-ST-477	AI-ST-716	Dr. Adrian Olaru <i>UPB, Romania</i>	Dr. Fahad Khan <i>MBZUAI, Dubai/ Linköping University, Sweden</i>	AI-ST-20	AI-ST-376	AI-ST-558	Dr. Arif Mahmood <i>ITU, PK</i>	AI-ST-799	AI-ST-70	AI-ST-22	AI-ST-26	AI-ST-51	AI-ST-292	AI-ST-325	AI-ST-14	Dr. Aneela Zameer <i>PIEAS, PK</i>
Day-4 August 19, 2022 Friday	Session 4.1						Closing Remarks											
	AI-ST-378	AI-ST-821	AI-ST-382	AI-ST-188	AI-ST-150	AI-ST-273												

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Day 1: August 16, 2022

9:45 – 12:30 Opening Message		19 th IBCAST 2022: ARTIFICIAL INTELLIGENCE AND SOFTWARE TECHNOLOGIES	-
Session 1.1	14:00 – 14:45	Invited Talk(Recommendation System)	Dr. Maizatul Akmar Binti Ismail Universiti Malaya, Malaysia
	14:45 – 15:30	Invited Talk (Energy-Efficiency and Robustness for TinyML and EdgeAI Systems: A Cross-Layer Approach)	Dr. M. Shafique NYU Abu Dhabi, UAE/ TU Wien, Austria
Break			
Session 1.2	16:00 – 16:45	Invited Talk	Dr. Faiza Netherland
	16:45 - 17:00	AI-ST-566: Node Embedding over Attributed Bipartite Networks in Dynamic Context	Hasnat Ahmed CESAT
	17:00 - 17:15	AI-ST-741: Online Content Veracity Assessment using Deep Representation Learning	Muhammad Bilal Bahria University Islamabad
	17:15 - 17:30	AI-ST-644: Critical heat flux prediction for safety analysis of nuclear reactors using machine learning	Rehan Zubair Khalid PIEAS

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Day 2: August 17, 2022

Session 2.1	09:00-09:45	Invited Talk(Edge Intelligence)	Dr. Naveed Sherwani Silicon Federation, USA
	09:45 –10:30	Invited Talk(Applied AI)	Dr. Shoab Ahmed Khan CARE PVT LTD, PK
Break			
Session 2.2	11:00 – 11:45	Invited Talk(Deep Learning for Computer Vision)	Dr. Syed Afaq Ali Shah Australia
	11:45 – 12:00	AI-ST-834 : Deep Vision for Pest Detection in Corn Fields	Anam Bibi Bahria University Islamabad
	12:00-12:15	AI-ST-31 : Virtual Reality Game Based Interaction with Exergaming using Wearable Sensors	Mushood Afsar Air University Islamabad
	12:15-12:30	AI-ST-839 : Context-Aware Neural Machine Translation using Selected Context	Sami Ul Haq NUST, CESAT
Break			
Session 2.3	14:00 – 14:15	AI-ST-601 : An In-Silico identification of Anti-CRISPR proteins by using descriptors derived from the primary structures	Wajid Arshad Abbasi AJK
	14:15 – 14:30	AI-ST-138 : An Effective Undersampling Approach to Deal with Class Imbalance Problem in Software Defect Prediction	Fawad Hassan Gillani CUST Islmabad
	14:30 – 14:45	AI-ST-801 : Analysis of Multimodal Representation Learning Across Medical Images and Reports Using Multiple Vision and Language Pre-Trained Models	Ahmad Hassan CEME, NUST
	14:45 – 15:00	AI-ST-77 : Intelligent Signs Language Understanding with Autonomous Landmarks for E-learning Context	Muhammad Jamil Hussain Air University
	15:00 – 15:15	AI-ST-467 : Blockchain-based Security and Privacy-aware Protocol for Vehicular Ad Hoc Network	Muhammad Waqas Malik UET Taxila,CESAT
	15:15 – 15:30	AI-ST-526 : Autonomous Drone Swarm Navigation in Complex Environments	Suleman Qamar PIEAS Islamabad
Break			
Session 2.4	16:00 – 16:45	Invited Talk (simulation based mission effectiveness assessment for a surface warship)	Dr. Halit Oguztuzun Turkey
	16:45-17:00	AI-ST-537 : TransformNet: Self-supervised representation learning through predicting geometric transformations	Muhammad Ali MBZUAI
	17:00-17:15	AI-ST-72 : Reliability based design of automated fault diagnosis utilizing AI algorithms	Hanan Saeed Harbin Engineering University
	17:15-17:30	AI-ST-298 : Assisted Research of the Control Satellite Orientation with Neural Network and Inertial Mechanism	Adrian Olaru UPB, Romania

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Day 3: August 18, 2022

Session 3.1	09:00-09:15	AI-ST-309: Context-Based Narrative Generation Transformer (NGen-Transformer)	Abraar Raza Samar FAST NUCES Islamabad, CESAT	
	09:15-09:30	AI-ST-477: Harnessing the Power of Machine Learning for Mapping of Iron Oxide Mineralization using Sentinel Satellite Spectral Imagery	Ahsan Mahboob University of the Witwatersrand	
	09:30-09:45	AI-ST-716: Channel boosting based detection and segmentation for cancer analysis in histopathological images.	Momina Liaqat Ali PIEAS	
	09:45 – 10:30	Invited Talk (AI in Robotics)		Dr. Adrian Olaru UPB, Romania
Break				
Session 3.2	11:00 – 11:45	Invited Talk Topic (Computer Vision)		Dr. Fahad Khan MBZUAI, Dubai / Linköping University, Sweden
	11:45 – 12:00	AI-ST-20: Physical Locomotion Detection using pre-classification for Muscles monitoring	Madiha Javeed Air University Islamabad	
	12:00-12:15	AI-ST-376: Opinion Mining and Classification of Pakistani News Headlines	Raza Mukhtar UET Taxila	
	12:15-12:30	AI-ST-558: Edge-AI based Face Recognition System: Benchmarking Analysis	Ammaz Anwar NUST, CESAT	
Break				
Session 3.3	14:00 – 14:45	Invited Talk		Dr. Arif Mahmood ITU, PK
	14:45 – 15:00	AI-ST-799: Explainable Prediction of Medical Codes through Automated Knowledge Graph Curation Framework	Mutahira Khalid NUST	
	15:00 – 15:15	AI-ST-70: Movement Disorders Detection in Parkinson's Patients using Hybrid Classifier	Mouazma Batool Air University Islamabad	
	15:15 – 15:30	AI-ST-22: Human Body 3D Reconstruction and Gait Analysis via Features Mining Framework	Israr Akhter Air University Islamabad	
Break				
Session 3.4	16:00 – 16:15	AI-ST-26: Fundamental Recognition of ADL Assessments Using Machine Learning Engineering	Mouazma Batool Air University Islamabad	
	16:15 – 16:30	AI-ST-51: Sentiment Analysis using Ensemble classifier for Entrepreneurs based on Twitter Analytics	Arslan Jazib Bahria University Islamabad	
	16:30 – 16:45	AI-ST-292: Machine Learning Techniques for Predicting UAV Design Parameters: Overview, Methodology and Potential Benefits	Omer Iqbal Bajwa NUST, CESAT	
	16:45-17:00	AI-ST-325: ANFIS based MPPT Controller in PV Electrical Generation	Asim Fareed NUST	
	17:00-17:15	AI-ST-14: Airfoil's Aerodynamic Coefficients Prediction using Artificial Neural Network	Hassan Moin IST Islamabad, CESAT	
	17:15-17:30	Invited Talk		Dr. Aneela Zameer PIEAS, PK

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Day 4: August 19, 2022

Session 4.1	09:00-09:15	AI-ST-378: Energy-Efficient Approximate Booth Multipliers for Convolutional Neural Networks	Azhar Zahid FAST NUCES Islamabad
	09:15-09:30	AI-ST-821: A Requirements Based Approach to Test Case Prioritization for Regression Testing	Misbah Naheed Riphah International University
	09:30-09:45	AI-ST-382: Face-Swap Deepfakes Detection using Novel Multi-directional Hexadecimal Feature Descriptor.	Qurat Ul Ain UET Taxila
	09:45 – 10:00	AI-ST-188: DLIRS: Deep Learning based Intelligent Routing in Software Defined IoT	Zabeeh Ullah NUST Islamabad
	10:00 – 10:15	AI-ST-150: A Pragmatic Decision Making Mechanism for Reusable Source Code Snippets Using Semantic Approach	Nazia Bibi NUST Islamabad
	10:15-10:30	AI-ST-273: YouTube Video Identification in Encrypted Network Traffic - A Case of Attacking Assumptions	Syed Muhammad Ammar Hassan Bukhari Comsats Islamabad
10:30-Onwards	Closing Remarks		