

19th IBCAST 2022: ARTIFICIAL INTELLIGENCE AND SOFTWARE TECHNOLOGIES

16-20 August 2022

Technical Program

	0900-1030		1100-1230		1400 – 1530		1600 – 1730	Extended													
Day-1 August 16, 2022 Tuesday	Opening Remarks			Session 1.1	Session 1.2																
				Dr. Maizatul Akmar Binti Ismail Universiti Malaya, Malaysia	Dr. M. Shafique NYU Abu Dhabi, UAE/ TU Wien, Austria		Dr. Faiza Bukhsh Twente, Netherland	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 Silicon Federation, USA	Dr. Shoab Ahmed Khan CARE PVT LTD, PK	Dr. Syed Afaq Ali Shah Australia	AI-ST-834	AI-ST-31	AI-ST-839	AI-ST-601 (No Show)	AI-ST-138	AI-ST-801	AI-ST-77	AI-ST-467	AI-ST-526	Dr. Arif Mahmood ITU, PK	AI-ST-537	AI-ST-72 (No Show)	AI-ST-298	Dr. Halit Oguztuzun Turkey				
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. Fahad Khan MBZUAI, Dubai/ Linköping University, Sweden		Dr. Adrian Olaru UPB, Romania	AI-ST-20	AI-ST-14	AI-ST-558	Dr. Sarfraz Khurshid, VC ITU			AI-ST-799	AI-ST-70	AI-ST-22	AI-ST-26	AI-ST-51	AI-ST-292	AI-ST-325	Dr. Aneela Zameer PIEAS, PK	AI Workshop Dice Analytics
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		19th IBCAST 2022: ARTIFICIAL INTELLIGENCE AND SOFTWARE TECHNOLOGIES		-
Opening Message Dr. Usman Qayyum				
Session 1.1 Dr. Khurram, IST	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 Dr. Ayaz Hussain, QAU	16:00 – 16:45	Invited Talk (Responsible side of Data Analytics)		Dr. Faiza, Bukhsh 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 Dr. Asif ullah PIEAS	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 Dr. Nasir, Mohyiddin CESAT	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 Dr. Irfan, CESAT	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 Islamabad
	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 Dr. M. Yasir CESAT	16:00 – 16:45	Invited Talk: Anomaly Detection using Computer Vision (GANS)	Dr. Arif Mahmood ITU, PK
	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

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Session 2.5 Mr. Faizan Ahmed Twente,, NL	17:15-17:30	AI-ST-298: Assisted Research of the Control Satellite Orientation with Neural Network and Inertial Mechanism	Adrian Olaru UPB, Romania
	17:30-18:15	Invited Talk (simulation based mission effectiveness assessment for a surface warship)	Dr. Halit Oguztuzun Turkey

Day 3: August 18, 2022

Session 3.1 Dr. Maizatul, UM	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 Topic (Towards Detailed Understanding of Visual World)	Dr. Fahad Khan MBZUAI, Dubai / Linköping University, Sweden
Break			
Session 3.2 Dr. Shafique, NYU	11:00 – 11:45	Invited Talk (AI in Robotics)	Dr. Adrian Olaru UPB, Romania
	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-14: Airfoil's Aerodynamic Coefficients Prediction using Artificial Neural Network	Hassan Moin IST Islamabad, CESAT
	12:15-12:30	AI-ST-558: Edge-AI based Face Recognition System: Benchmarking Analysis	Ammaz Anwar NUST, CESAT
Break			
Session 3.3 Dr. Yaser, NCAI	14:00 – 14:45	Invited Talk	Dr. Sarfraz Khurshid, VC ITU
	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

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Break			
Session 3.4 Dr. Naveed Ahmad, FAST	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	Invited Talk	Dr. Aneela Zameer PIEAS, PK
	17:00-18:30	DATA ANALYTICS & AI IS NOT A SILVER BULLET	Mr. Ali Raza Anjum & Mr. Umer Chaudhry, DICE ANALYTICS

Day 4: August 19, 2022

Session 4.1 Dr. M. Haroon, UET	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		