IEEE IRI 2022 Program (version: August 3, 2022)

Program Overview (*note that the sessions may have different starting times and lengths; please refer to the detailed program below for the specific information; the table below provides an overview and an overview only*)

Tuesday (Aug 9) Student Volunteers: **Bradley Cox** (Virginia State University) and **Md Rayhan Amin** (Mississippi State University)		Wednesday (Aug 10) Student Volunteers: **Bradley Cox** (Virginia State University) and **Aurek Chattopadhyay** (University of Cincinnati)		Thursday (Aug 11) Student Volunteers: **Shahariar Rabby** (University of Alabama at Birmingham) and **Rajatsubhra Chakraborty** (Wayne State University)	
Opening & Keynote by Prof. Hiroyuki Kitagawa Session Chair: **Shu-Ching Chen**		**Awards & Keynote by Guy Paillet** Session Chair: **Danda Rawat**		F1 Knowledge Engineering Session Chair: **Nan Niu**	F2 (AIHC-1) Session Chair: **Lydia Bouzar-Benlabiod**
A1 Deep Learning Session Chair: **Baocheng Geng**	**A2 Time Series Analysis** Session Chair: **Min Chen**	D1 Object Recognition Session Chair: **Lydia Bouzar-Benlabiod**	D2 Security Session Chair: **Baocheng Geng**	G1 (DIM & TechAAL) Session Chairs: **Saad Sadiq** and **Daniel Alexandre**	G2 (AIHC-2) Session Chair: **Lydia Bouzar-Benlabiod**
B1 Smart Cities Session Chair: **Nan Niu**	**B2 ML and AI** Session Chair: **Baocheng Geng**	E1 Health and Accessibility Session Chair: **Min Chen**	E2 Applications Session Chair: **Desta H. Hagos**		
C1 (EMRITE) Session Chair: **Min-Yuh Day**	C2 Software Engineering Session Chair: **Nan Niu**				

==Time Zone: Las Vegas local time (Pacific Time Zone PDT)==

IEEE IRI Conference Day 1: Tuesday, August 9, 2022

9:00-9:15am	Welcome, Conference Opening Remarks (General Chairs, PC Chairs)
9:15-10:15am	**Keynote 1:** *Hiroyuki Kitagawa* *Professor, International Institute for Integrative Sleep Medicine,* *University of Tsukuba, Japan*

10:15 - 10:30 am	Coffee Break
10:30-11:25am	**Session A**
	Session A1 **Deep Learning** **Session Chair:** Baocheng Geng, University of Alabama at Birmingham, USA **Zoom Link:** https://us02web.zoom.us/j/89859751741
IRI13 (15 min)	**IRI13: Deep Formality: Sentence Formality Prediction with Deep Learning** Can Li, Wenbo Wang, Bitty Balducci, Lingshu Hu, Matthew Gordon, Detelina Marinova, and Yi Shang
IRI49 (15 min)	**Analysis of Student Emotional States in AP Courses through Social Media Based on Deep Learning** Emily Yang and Ying Jin
IRI9 (15 min)	**Classification of Electroencephalograms during Mathematical Calculations Using Deep Learning** Umang Goenka, Param Patil, Kush Gosalia, and Aaryan Jagetia
IRI62 (10 min)	**Embracing Deep Learning for Crack Segmentation in SEM Images of Metal Additive Manufacturing** Xiaoliang Wang, Justin Lowery, Yongjin Lu, Wei-Bang Chen, Shanshan Zhang, and Zhenhua Wu
	Session A2 **Time Series Analysis** **Session Chair:** Min Chen, University of Washington (Bothell), USA **Zoom Link:** https://us02web.zoom.us/j/87422710820
IRI41 (15 min)	**Few-shot Time-Series Forecasting with Application in Vehicular Traffic Flow** Victor Tran and Anand Panangadan
IRI7 (15 min)	**NLP Based Anomaly Detection for Categorical Time Series** Matthew Horak, Sowmya Chandrasekaran, and Giovanni Tobar
IRI18 (15 min)	**A News Recommendation Model Based on Time Awareness and News Relevance** Shaojun Ren and Chongyang Shi
IRI54 (10 min)	**Towards Undeceived: Fake Reviews Detection Models Comparison** Keming Wu and Faryaneh Poursardar
11:25am-1:00pm	**Lunch break**
1:00 - 1:55 pm	**Session B**
	Session B1 **Smart Cities** **Session Chair:** Nan Niu, University of Cincinnati, USA

IRI46 (15 min)	**A Multi-Dimensional Analysis of Traffic Incident Data for Disaster Management in Smart Cities** Carson Leung, Joshua Thomas, and Matthew Kwiatkowski
IRI73 (15 min)	**Multi-Task Local-Global Graph Network for Flight Delay Prediction** Tianyi Wang and Shu-Ching Chen
IRI45 (15 min)	**Regression-Based Data Science Solutions for Transportation Analytics** Carson Leung, Jason Tran, and Tanisha Turner
IRI69 (10 min)	**Fake News Detection: An Investigation based on Machine Learning** Payal Agarwal and Sandeep Reddivari
	Session B2 **ML and AI** **Session Chair:** Baocheng Geng, University of Alabama at Birmingham, USA **Zoom Link:** https://us02web.zoom.us/j/87422710820
IRI31 (15 min)	**A Class-Imbalanced Study with Feature Extraction via PCA and Convolutional Autoencoder** Zahra Salekshahrezaee, Joffrey Leevy, and Taghi Khoshgoftaar
IRI19 (15 min)	**Multilayer Meta-Learning Approach to Forecasting Air Pollutants** Samuel A. Ajila
IRI75 (15 min)	**Study of Adversarial Machine Learning for Enhancing Human Action Classification** Demarcus Edwards, Danda B. Rawat, and Brian Sadler
IRI64 (10 min)	**Neural Network Accelerated Tuple Search For Relational Data** Limin Ma and Ken Pu
1:55 – 2:10pm	Coffee Break
2:10 - 3:10pm	**Session C**
	Session C1 **EMRITE Workshop** **Session Chair:** Min-Yuh Day, National Taipei University, Taiwan **Zoom Link:** https://us02web.zoom.us/j/89859751741
EMRITE5207 (15 min)	**An Automatic Evaluation Method for Open-domain Dialogue Based on BLEURT** Lee Jia-Jun and Wu Shih-Hung
EMRITE7945 (15 min)	**Developing Relation Types of Cryptocurrency Anti-Money Laundering Knowledge Graph** Min-Yuh Day, Pei-Tz Chiu, Yung-Wei Teng, and Chao-Lin Liu
EMRITE3803 (15 min)	**How Travel Vlogs on YouTube Influence Consumer Travel Behavior in Indonesia: Empirical Evidence from fsQCA** Wen-Kuo Chen, Lin Sheng Ling, Huang Yu Jie, Pantas H. Silaban, Yuni Kartika Sitanggang, and Andri Dayarana K. Silalahi
EMRITE4938 (15 min)	**Does nationality affect eWOM? Factors affecting customer satisfaction and eWOM in Indonesian Online Clothing Brands** Serhan Demirci, Ahmad Muzakki Binamak, Muhammad Rafli Dwi Pradana, Achmad Akbar Hidayatulloh, Te-Yu Peng and Au Due Tang
	Session C2 **Software Engineering** **Session Chair:** Nan Niu, University of Cincinnati, USA

IRI74 (15 min)	**Artificial Intelligence in Software Requirements Engineering: State-of-the-Art** Kaihua Liu and Sandeep Reddivari
IRI53 (15 min)	**A Searching Mechanism for Services of IoT Applications** Kaibin Xie
IRI23 (15 min)	**Blockchain-Oriented Requirements Engineering: New Directions** Sandeep Reddivari and Aaron Wilson
IRI68 (10 min)	**Evaluating Audio-to-Text utilizing Dragon in the Context of Just-in-Time Requirements** William Vickers and Sandeep Reddivari

9:05-9:15am	Awards (General Chairs, PC Chairs)
9:15 - 10:15am	**Keynote 2:** **Guy Paillet** *CEO, General Vision* **Real-Time Machine Learning: Human Condition Monitoring based on NeuroTile Photopletysmograph Sensing** **Session Chair**: Danda Rawat, Howard University, USA **Zoom Link:** https://us02web.zoom.us/j/89859751741
10:15-10:30am	Coffee Break
10:30-11:25am	Session D
	Session D1 **Object Recognition** **Session Chair:** Lydia Bouzar-Benlabiod, Ecole Nationale Supérieure d'Informatique, Algeria **Zoom Link:** https://us02web.zoom.us/j/89859751741
IRI28 (15 min)	**Iterative Approach for Novel Entity Recognition in Social Media Messages** Brandon Chenze, Eugene Lee, and Anand Panangadan
IRI76 (15 min)	**Fully Automatic Top Coat Layer Recognition in Thermal Barrier Coating Images** Yongjin Lu, Wei-Bang Chen, Xiaoliang Wang, and Ben Zimmerman
IRI29 (15 min)	**Validation of Simulated Mechanical Vibration Data for Operational State Recognition System** Jukka Junttila, Anssi Sillanpää and Ville Lämsä
IRI71 (10 min)	**Counting Pixels for an Effective Axis Detection** Keeheon Lee, Eury Sohn, Kunhee Ryu, and Seongmin Oh
	Session D2 **Security** **Session Chair:** Baocheng Geng, University of Alabama at Birmingham, USA **Zoom Link:** https://us02web.zoom.us/j/87422710820
IRI44 (15 min)	**Online Malware Classification with System-Wide System Calls in Cloud IaaS** Phillip Brown, Austin Brown, Maanak Gupta and Mahmoud Abdelsalam
IRI38 (15 min)	**ImpartialGAN: Fair and Unbiased Classification** Neha Bhargava, Yves Junior Kwame Kamgaing and Ramazan Aygun
IRI72 (15 min)	**Text-Based Machine Learning Models for Cross-Domain Vulnerability Prediction: Why They may not be Effective?** Kollin Napier and Tanmay Bhowmik
IRI61 (10 min)	**Automatic labeling of the elements of a vulnerability report CVE with NLP** Kensuke Sumoto, Kenta Kanakogi, Hironori Washizaki, Nobukazu Yoshioka, Naohiko Tsuda, Yoshiaki Fukazawa, and Hideyuki Kanuka
11:25am-1:00pm	**Lunch break**
1:00-2:10pm	**Session E**

IRI50 (15 min)	**Using SHAP Analysis to Detect Areas Contributing to Diabetic Retinopathy Detection** Esmaeil Shakeri, Trafford Crump, Ezekiel Weis, Roberto Souza, and Behrouz Far
IRI39 (15 min)	**An Alternative Timing and Synchronization Approach for Situational Awareness and Predictive Analytics** Supriya Chinthavali, Shamimul Hasan, Srikanth Yoginath, Haowen Xu, Terry Jones, Cozmo Engebretsen, Joseph Olatt, Tansakul Varisara and Carter Christopher
IRI51 (15 min)	**COVID-19 Vaccine Infodemiology using Unsupervised Natural Language Processing** Esmaeil Shakeri, Anja Slama, Roberto Souza, and Behrouz Far
IRI42 (15 min)	**ExplainabilityAudit: An Automated Evaluation of Local Explainability in Rooftop Classification** Duleep Rathgamage Don, Jonathan Boardman, Sudhashree Sayenju, Ramazan Aygun, and Sereres Johnston
IRI66 (10 min)	**Improving GIF Image Accessibility on Web** Apoorva Bhatnagar and Min Chen
IRI3 (15 min)	**The Rise of Metaverse and Interoperability with Split-Protocol** Andrew Mentges, Bharat Rawal, and Shakaib Ahmad
IRI40 (15 min)	**Audio Sentiment Analysis using Spectrogram and Bag-of-Visual-Words** Sophina Luitel and Mohd Anwar
IRI32 (15 min)	**Dynamic Packet Filtering Using Machine Learning** Chandan Sai Chebrolu, Chung-Horng Lung, and Samuel Ajila
IRI58 (10 min)	**A Deep Learning Sequential-based Model for Predicting Victories in Video Games** Francoise Blanc, Azhar Syed, Ali Mohammadi Esfahani, Sandeeo Reddy Venna, and Samuel A. Ajila
IRI59 (10 min)	**Optimization of SHA-256 with Multi-thread Split Protocols** Bharat Rawal, Harsh Miyani, and Md Labu

IEEE IRI Conference Day 3: Thursday, Aug 11, 2022

10:30-11:30am	**Session F**
	Session F1 **Knowledge Engineering** **Session Chair:** Nan Niu, University of Cincinnati, USA **Zoom Link:** https://us02web.zoom.us/j/89859751741
IRI20 (15 min)	**Graph Knowledge Transfer for Offensive Language Identification with Graph Neural Networks** Yen-Hao Huang, Kevin Harryyanto, Che-Wei Tsai, Ratana Pornvattanavichai, and Yi-Shin Chen
IRI35 (15 min)	**A Graph Structure to Discover Patterns in Unstructured Processes of Product Development** Julian Ziegler, Peter Reimann, Bernhard Mitschang, Christoph Schulz, and Florian Keller
IRI17 (15 min)	**Fine-Grained ICD Code Assignment Using Ontology-Based Classification** Joshua Carberry and Haiping Xu
IRI65 (10 min)	**Incremental Computation of Information Gain in Temporal Relational Streams** Ken Pu and Limin Ma
	Session F2 **Artificial Intelligence for HealthCare (AIHC) Workshop - I** **Session Chair:** Lydia Bouzar-Benlabiod, Ecole Nationale Supérieure d'Informatique, Algeria **Zoom Link:** https://us02web.zoom.us/j/87422710820
AIHC1520 (15 min)	**Healthcare Provider Summary Data for Fraud Classification** Justin Johnson and Taghi Khoshgoftaar
AIHC5046 (15 min)	**Optimizing Ensemble Trees for Big Data Healthcare Fraud Detection** John Hancock and Taghi Khoshgoftaar
AIHC0711 (15 min)	**Classification of CXR Chest Diseases by Ensembling Deep Learning Models** Moulay Akhloufi and Adnane Ait Nasser
AIHC8402 (15 min)	**Multi-Scale Deep Ensemble Learning for Melanoma Skin Cancer Detection** Takfarines Guergueb, Moulay Akhloufi
11:30am-1:00pm	**Lunch break**
1:00 – 2:00pm	**Session G**
	Session G1 **DIM & TechAAL Workshops** **Session Chairs:** Saad Sadiq (University of Miami, USA), Daniel Alexandre, and Ivan Miguel Pires (Universidade de Tras-os-Montes e Alto Douro, Portugal) **Zoom Link:** https://us02web.zoom.us/j/89859751741
DIM12 (15 min)	**Video Alignment of Lecture Notes Missing Corners** Adeyemi Fagbemi, Ramazan Aygun, Mahmut Karakaya, and Nesrin Sahin
DIM14 (15	**Public Outlook on E-sports in China: A Content and Sentiment Analysis of Social Media**

min)	Yifan Wang, Xiaochuan Zheng, and Tianda fan
DIM16 (15 min)	**Smart Parking System with PlacePod, LoRaWAn IoT sensors and Android app** Sofeem Nasim, Mourad Oussalah, Tarja Outila, Johannes Jutila
TechAAL1 (15 min)	**Identifying universal safety signs using computer vision for an assistive feedback mobile application** Alankrit Mishra, Nikhil Raj, Shubham Bodhe, and Garima Bajwa
	Session G2 **Artificial Intelligence for HealthCare (AIHC) Workshop - II** Chair: Lydia Bouzar-Benlabiod, Ecole Nationale Supérieure d'Informatique, Algeria **Zoom Link:** https://us02web.zoom.us/j/87422710820
AIHC4944 (15 min)	**ARSeg: An Attention RegSeg Architecture for CXR Lung Segmentation** Rafik Ghali and Moulay Akhloufi
AIHC4082 (15 min)	**Adding Explainability to Machine Learning Models to Detect Chronic Kidney Disease** Md Ariful Islam, Kowshik Nittala, Garima Bajwa
AIHC8723 (15 min)	**Study of Metadata Impact on COVID-19 Detection using Convolutional Neural Networks** Nooshan Sedaghati and Bahareh Abbasi
	End