AIBThings-2023

IEEE International Conference on Artificial Intelligence, Blockchain, and Internet of Things

September 16-17, 2023

Central Michigan University, USA

Conference Program

IEEE International Conference on Artificial Intelligence, Blockchain, and Internet of Things
Central Michigan University (CMU), USA
September 16-17, 2023

DAY-1: In-Person Sessions
Saturday, September 16, 2023
Venue: Courtyard Hotel Room Omega III
All timing follows Eastern Standard Time (EST), UTC-5

Time	Event
07:00 - 17:00	Registration
08:00 - 08:05	Conference Opening
08:05 - 08:40	Keynote: Latif Ladid, "IPv6-Based Blockchain & IoT"
08:40 - 11:00	Industry Forum Session-I, "IPv6-based 5G, IoT, Cloud Computing"
11:00 - 11:15	Coffee Break
11:15 - 12:00	Panel Discussion: Women in AI, IoT, and Blockchain
12:00 - 13:00	Lunch Break
13:00 – 13:30	Distinguish Keynote Speaker: Ahmed Elnakib, "Emerging Machine Learning Technologies in Healthcare"
13:30 - 15:00	Technical Session – 1
15:00 - 15:15	Coffee Break
15:15 - 17:30	Technical Session – 2
19:00 - 21:00	Dinner

DAY-2: Online Sessions
Sunday, September 17, 2023
Venue: Google Meet
All timing follows Eastern Standard Time (EST), UTC-5

Time	Session	
08:00 – 10:15	Technical Session - 3	Parallel Sessions
	Technical Session - 4	
10:15 – 10:30	Break	
10:30 - 11:15	Keynote: Soumya Kanti Datta, "Pioneering A Secure, Trustworthy, Sustainable Next-Generation Internet"	
11:15 - 12:30	Industry Forum Session-2, "Blockchain for IoT and Enterprise Verticals"	
12:30 – 12:45	Break	
12:45 – 14:30	Technical Session - 5	Parallel Sessions
	Technical Session - 6	
14:30 – 14:45	Break	
14:45 – 16:30	Technical Session - 7	Parallel Sessions
	Technical Session - 8	
16:30 - 16:40	Closing	

Day 1: September 16, 2023
Technical Session -1
Session Chairs: Mahmoud Darwich, Ahmed Elnakib

ID	Author/Title
5	**Jorge Ramirez, Wen Yu** Safe Exploration in Reinforcement Learning for Learning from Human Experts
31	**John Swaim, Chad Workman, Jia Di, Xiaojiang Du** An Internet of Things Testbed for Education and Community Research
38	**Luke Desmond, Mohamed Salama** Integrating Blockchain & Emerging Technologies for Sustainability Assurance in the Built Environment
46	**Amit Das, Mostafa Rahgouy, Minh Smith, Tathagata Bhattacharya, Gerry Dozier, Cheryl D. Seals** Online Sexism Detection and Classification by Injecting User Gender Information
51	**Saad Bin Shams, Andreas Kind, Florian Ansgar Jaeger, Gunter Beitinger, Ionut Alexandru Leonte, Maximilian Weinhold, Vinh Pham** Trustworthy Supply Chain Exchange for Product Carbon Footprint
81	**Jonathan Gregory, Qi Liao** Adversarial Spam Generation Using Adaptive Gradient-Based Word Embedding Perturbations

Day 1: September 16, 2023
Technical Session - 2
Session Chairs: Zag Elsayed, Anik Baul

ID	Author/Title
36	**Md. Rafiul Biswas, Sulaiman Khan, Zubair Shah** Twitter Users Discussions About Migrants Rights and Facilities During FIFA World Cup 2022
77	**Atish Bagchi, Sivachandran Chandrasekaran** IoT Edge-based Machine Learning Approach for Detection of Partial Discharge in Power Transformers
50	**Even Sekhri, Mart Tamre, Rajiv Kapoor, Rahul Kumar** A Novel Real-Time Parametric Tracking Approach for Robust Microwave Filter Tuning
87	**Vijay A. Kanade** ChloroView: A Sustainable Biophilic Alternative to Conventional Displays
89	**Arpita Sarker, Alexander Jesser, Markus Speidel** Advancing Decentralized IoT with Privacy-preserving AI: Harnessing Federated Learning and NLP Techniques
88	**Mirza Essa Neebraz, Ammar Altaweel, James R. Morrison** Persistent Drone Light Shows: Petri Net Models, Performance Evaluation and Resource Requirements

Day 2: September 17, 2023
Technical Session - 3
Session Chairs: Ahmed Elnakib, Alaa Ali Hameed, Anik Baul

3	**Madan Parajuli , Amy W. Amara , and Mohamed Shaban** A Novel Deep-Learning Based Approach for Mild Cognitive Impairment Screening in Patients with Parkinson's Disease
6	**Md. Bipul Hossain , Na Gong , and Mohamed Shaban** Computational Complexity Reduction Techniques for Deep Neural Networks: A Survey
12	Raneem Qaddoura, Mariam M. Biltawi, Hossam Faris A Metaheuristic Approach for Life Expectancy Prediction based on Automatically Fine-tuned models with Feature Selection
25	**Mohamed Mouhajir, Mohammed Nechba, Yassine Sedjari** High Performance Computing Applied to Logistic Regression: A CPU and GPU Implementation Comparison.
34	**Catarina Reis, Bernardo Figueiredo** COW: A Proof-of-Concept DLT Platform For The Agri-Food Supply Chain
62	**Charles Rawlins, S. Jagannathan** Improved Intelligent Ledger Construction for Realistic IoT Blockchain Networks
64	**Charles Rawlins, S. Jagannathan** Towards Robust Consensus for Intelligent Decision-making in IoT Blockchain Networks

Day 2: September 17, 2023
Session - 4
Session Chairs: Mahmoud Darwich, Ahmed Ammar, Anik Baul

41	**Brett Sicard, Quade Butler, Patrick Korsieb, Yuandi Wu, Youssef Ziada, Andrew Gadsden** IIoDT: Industrial Internet of Digital Twins for Hierarchical Asset Management in Manufacturing
45	**Brett Sicard, Quade Butler, Patrick Korsieb, Yuandi Wu, Youssef Ziada, Andrew Gadsden** Design Considerations for Building an IoT Enabled Digital Twin Machine Tool Sub-System
47	**Darshan Gangaram Sarkale, Vedant Jagdishbhai Gabani, Wandong Zhang, Thangarajah Akilan** NLP-driven Content Classification Towards Fake News and Bully Detection
52	**Md Abu Sayeed, Patrick Carr** An Accurate and Low-power Sleep Apnea Detector in the Edge-IoT Platform
54	**Çağdaş Özer, Mustafa Takaoğlu, Taner Dursun** Forecasting the Impact Of The News On Cryptocurrency via Machine Learning Algorithms
55	**Hunter Phillips, Steven Lasch, Mahesh Maddumala** American Sign Language Translation Using Transfer Learning
56	**Gerrit Schumann, Jan-Philipp Awick, Jorge Marx Gómez** Natural Language Processing using Federated Learning: A Structured Literature Review

Day 2: September 17, 2023
Session - 5
Session Chairs: Yasser Ismail, Mohamed Shaban, Kasem Khalil

58	**Kasra Ahmadi, Molud Esmaili, Siavash Khorsandi** A P2P File Sharing Market Based on Blockchain and IPFS with Dispute Resolution Mechanism

59	**Faezeh Soleimani, Saeed Bidi, Omid Habibzadeh-Bigdarvish, Xinbao Yu** Applications of Machine Learning in Predicting the Bridge Deck Surface Temperature
63	**Mahmoud Darwich, Kasem Khalil, Yasser Ismail, Magdy Bayoumi** Adaptive Video Streaming: An AI-Driven Approach Leveraging Cloud and Edge Computing
76	**Sulaiman Khan, Hazrat Ali, Zubair Shah** Brain Hemorrhage Detection Using Improved AlexNet with Inception-v4
69	**Mahmoud Darwich, Kasem Khalil, Yasser Ismail, Magdy Bayoumi** Edge Computing for Efficient Storage and Low-Latency Video Streaming in Cloud Environments
65	**Nilanjana Raychawdhary, Nathaniel Hughes, Sutanu Bhattacharya, Gerry Dozier, Cheryl D. Seals** A Transformer-Based Language Model for Sentiment Classification and Cross-Linguistic Generalization: Empowering Low-Resource African Languages
67	**Ghazia Qaiser, Siva Chandrasekaran, Rifai Chai, Jinchuan Zheng** Classification of DDoS traffic for Industrial Internet of Services using Deep learning approaches
	Day 2: September 17, 2023 **Technical Session - 6** **Session Chairs: Alaa Ali Hameed, Marwa Ben Ali**
42	**Fahad Alhabardi, Anton Setzer** A model of the Solidity-style smart contracts in the theorem prover Agda
71	**Mostafizur Rahman, Saiful Islam, Sadia Binta Sarowar, Meem Tasfia Zaman** Multiple Disease Prediction using Machine Learning and Deep Learning with the Implementation of Web Technology
72	**Mrunal Prakash Gavali, Abhishek Verma** Automatic Recognition of Emotions in Speech With Large Self-Supervised Learning Transformer Model
73	**Colton Hagan, Tarek A. Idriss** Empowering Web 3.0: Data Privacy Solutions for the Internet of Things
74	**Tarek Idriss, Majd Safi** Lightweight Random Obfuscation Protocol: A PUF-based Mutual Authentication Protocol for IoT Devices
75	**Serge Sandakly, Charbel Salem, Khalil Challita, Shuvalaxmi Dass, Joseph Azar, Jacques Bou Abdo, Jacques Demerjian** XorshiftH128+: A hybrid random number generator for lightweight IoT
79	**Wayne Goodridge, Koffka Khan, Kumar Sookram, Kwasi Edwards** Blockchain-based Information-sharing and Transparent Security for Vehicle Asset Fintech ManagEment (BITSAFE)
	Day 2: September 17, 2023 **Technical Session - 7** **Session Chairs: Yasser Ismail , Ahmed Ayman**
97	**Ayesha Zafar, Sardar Muneeb, Muazz Amir, Akhtar Jamil, and Alaa Ali Hameed** A Multi-modal Approach to Lung Tumor Detection using Deep Learning

98	**Faiq Ahmad Khan, Akhtar Jamil, Alaa Ali Hameed and Momina Moetesum** Clinical Decision Support System for Diabetes Classification with an Optimized CNN using PSO
85	**Hazrat Ali, Mohammad Farhad Bulbul, Zubair Shah** Prompt Engineering in Medical Image Segmentation: An Overview of the Paradigm Shift
60	**Hazrat Ali, Junaid Qadir, Tanvir Alam, Mowafa Househ, Zubair Shah** ChatGPT and Large Language Models in Healthcare: Opportunities and Risks
68	**Anika Kanwal, Siva Chandrasekaran, Adnan Akhunzada** Stock Price Prediction using CuDNNLSTM and multiple CNN layers
82	**Ujunwa Madububambachu, Kayla White, Kenechukwu Sibeudu, Ahmed Sherif, Mohamed Elsersy** Secure and Privacy-Preserving Aggregation Scheme for Traffic Management Systems
83	**Mohamed Elsersy, Ahmed Sherif, Ahmad Abdel-Aliem Imam, Mohammad M. R. Khan Mamun, Kasem Khalil, Mohamed Haitham** Federated Learning Model for Early Detection of Dementia Using Blood Biosamples
	Day 2: September 17, 2023 **Technical Session - 8** **Session Chairs: Kasem Khalil, Omar Eddash**
99	**Hizbullah Khan Jadoon, Akhtar Jamil, Atif Zulfiqar, Alaa Ali Hameed** Enhancing the Multiclass Image Classification Accuracy using Binary Classifiers for Semi-Supervised Learning
91	**Huber Nieto-Chaupis** Fundaments of a Prospective Internet of Outdoor Viral Surveillance
92	**Huber Nieto-Chaupis** Machine Learning as a Blind Creator of Infinite Algebras in the Context of Strings Theory
70	**Ahmed Alsalem, Mohamed Zohdy** Machine Learning Techniques in Additive Manufacturing: A Review
86	**Hanan Thwany, Muhammad Alolaiwy, Mohamed Zohdy, William Edwards, Chris J. Kobus** Machine Learning Approaches for EV Charging Management: A Systematic Literature Review
57	**Saad Choukry, Youssef Iraqi, Loubna Mekouar** An Efficient Rating System Using Blockchain for Recommender Systems
84	**Kasem Khalil, Mohammad M. R. Khan Mamun, Ahmed Sherif, Mohamed Elsersy, Ahmad Abdel-Aliem Imam, Kamal Abouzaid** A Dementia Diagnosis Technique Based on AI and Hardware Acceleration
37	**Tosin Olusola Ige, Christopher Kiekintveld** Performance Comparison and Implementation of Bayesian Variants for Network Intrusion Detection