

IEEE CyberSciTech/DASC/PICom/CBDCom 2024

Venue: Henann Regency Resort and Spa

Advanced Program

Day 1 (11/18)	09:30 – 17:00	Registration (near Golden Pavilion Room)			
	10:00 – 11:30	Birds-of-a-Feather (BoF) (Golden Pavilion Room)			
	13:00 – 14:30	Tutorial (Golden Pavilion Room)			
	14:30 – 15:00	Coffee Break (Golden Pavilion Room)			
	15:00 – 17:00	Panel Discussion (Golden Pavilion Room)			
	18:30 – 21:00	Welcome Reception (***) Sunset Restaurant, Paradise Garden Resort Hotel and Convention Center)			
Day 2 (11/19)	08:00 – 17:00	Registration (near Golden Pavilion Room)			
	08:30 – 09:20	Welcome Ceremony (Golden Pavilion Room)			
	09:30 – 10:20	Keynote Talks (Golden Pavilion Room)			
	10:20 – 10:40	Coffee Break (Golden Pavilion Room)			
	10:40 – 11:00	Session D2A-A (Golden Pavilion Room)	Session D2A-B (Sapphire Room)	Session D2A-C (Jade Room)	Session D2A-D (Ruby Room)
	11:00 – 11:20	GA4-Hyper (Session Chair: Ao Guo, Nagoya University, Japan) Leveraging ECG Signal for People Identification under Different Emotion States - Zhiyong Huang, Yuang Meng, Ao Guo, Wald Pothier, Jiamia Mi	HIEM (Session Chair: Antonio Guerri, National Research Council of Italy, Italy) Architecting a Privacy-Aware IoT-Enabled Platform for Behavior Monitoring in Beach Resorts: A Case Study - Giovanni Campari, Davide Caronetti, Marco Di Rienzo, Corrado Santoro, Federico Paolo Sartori	DASC A (Session Chair: Tadashi Dohi, Hiroshima University) Wii-U IoT: Registering and Evaluating the Security and Resilience of Internet of Things and Connected Devices Using a Collaborative Platform - Jian Dequn Fattori Jaafar	Representation Learning for Complex Networks - Shiyu Chen, Jun Hou
	11:20 – 11:40	Practical NLP in Foreign Language Teaching Practices in the Age of AI - Case Studies of Chinese and Japanese Learners - Xiaolin Wu, Shuang Zhu, Jingtao Zhou, Ruyun Yao Online: Seamless-Integrated Pedagogy Report Generation Leveraging Positional Encoding for Text and Images - Yishi Pan, Kai Li, Han Shu, Jinghao Wu, Fahie Shao, Junyi Xu, Guanzhou Sun	Comprehensive System for Indoor Assistance and User Interaction - Francesco Cauteruccio, Miriana Russo, Corrado Santoro, Federico Paolo Sartori, Antonio Tufano Enhancing Performance of Augmented Reality on Distributed IoT-Edge-Cloud Infrastructures - Fabrizio Marozzo, Neandro Prasta, Rosa Vercheri, Andrea Vio	CyberSecurity Domains: A Design Pattern for Creating Zero Trust Architectures through Microsegmentation - Claudio Zanasi, Mirco Marchetti, Michele Colagrande	Online: Intelligent Task Offloading in IoT-Driven Digital Twin Systems via Hybrid Federated and Reinforcement Learning - Shivam Doyal, Sushakar Kumar, Sunil K. Singh, Bin B. Gupta, Venkta Ayva, Kwock Tai Chu
	11:40 – 12:00	Online: IP-OCNN-BEEM model for predicting Leaf Area Index - Wang Dong, Zhou Guoyuan, Jingke Xu, Juan Esteban Batista, Guo Jie, Huihui Bai	Graph Attention Network with LSTM for Smart Contract Vulnerability Detection - Kyungjin Jang, Hyunah Ra, Imbeom Jang	Dynamic Allocation of Data Security in Wireless Sensor Networks Mohammed Zamzani AH	Online: SA-RFD Approach for Optimizing QoS Management in SDN Service Chains - Wen Ji, Chenhan Liu, Jiang Liu, Hongyong Xu, Lianjie Xu, Jun Hu
	12:00 – 13:00	Lunch Break (Sea Breeze Café)			
	13:00 – 13:50	Session D2P-A (Golden Pavilion Room)	Session D2P-B (Sapphire Room)	Session D2P-C (Jade Room)	Session D2P-D (Ruby Room)
13:50 – 14:10	Adaptive Gradient Clipping Algorithms for Differential Privacy: Enhancing Cyber Security and Trust - Siman Chen, Weidong Han, Haoping Shi, Hongyan Feng, Jun Hu Online: Learning of AI-Based Security Alert Sensing Systems - Samad Nidchi, Ta Bao, Takashi Takahashi, Akira Yamada, Satoshi Ozawa, Daikoku Inoue	PICom A (Session Chair: Federico Fausto Sartori, University of Catania, Italy) A Study on Consumer-Grade EEG Headsets in the Field Applications - Luigi Rizzo, Paolo Zicari, Franco Ciccarelli, Antonio Guerri, Massimo Moser, Andrea Vio	EDCSA (Session Chair: Bernady Apudyan, Kyushu Sangyo University, Japan) Crew Management Support Application for Operation Managers and Boatyard System Security - Toshihiro Uchiyama, Chieko Sogauchi, Yohiro Inoue, Hiroyuki Hatakeyama, Kenjiro Hasegawa	Online: Attack Path Extraction Based on VGAE and DBSCAN - Z. Ang Liu, Lu Chen, Yong Li, Guang Xin Guo, Teng Yun Wang	
14:10 – 14:30	Privacy-Preserving Parameter Aggregation Scheme Based on Ten Leaders for Federated Learning - Weiyi Wang, Zhutao Lan, Tianhui Li, Kouichi Sakurai, Chuntao Su	Comprehensive Analysis of Dog Emotions Using Skeletal and Visual Features - Chuan-Yu Chang, Ju-Yeh Chu, Ju-Hua Huang, Yi-Hsiang Chen, Yi-Hsiang Chen	VR-AR: A Virtual Reality Trainer for Industrial Plant Mill - Laurence Earl Romagosa, Elio Tabuada, Sebastião Vitoriano, Ryan Avelas, Stephen Ham, Francis Jamin Alagon, Steve Car, Amel Zanjaly, Cheryl Mae G. Vilante	Online: Review of Collaborative Inference in Edge Intelligence: Emphasis on CNN Partition - Ning Li, Fei Dai, Xinshou Chai, Guo Lu, Xiaoguo Wu, Bi Huang	
14:30 – 14:50	Internet Security and Privacy Awareness Among College Students in the Philippines - Jim Alives Foss, Baby Grace Liego	Self-Organizing and Subject-Specific Emotion Recognition Across Video Stimuli Using EEG Signals - Zhiyong Huang, Ao Guo, Jiamia Mi	Online: Congestion Prediction by Multimodal Learning of Audiovisual Data - Ido Ide, Yuki Toyosaki, Kai Cheng, Keisuke Abe	Online: SelfFT: Scalable Text Communication Pattern SFT Protocol - Jianjun Wang, Xiaodong Wang, Hu Liu	
14:50 – 15:10	Fuzzy Logic-Based Deep Reinforcement Learning Pre-Training: A Case Study in MED Task Offloading - Jiale Zhang, Yangke Lu, Zhongqian Du, Wogeduo Bao	Multimodal Sequential Deep Learning for Apathy Detection in People Living with Dementia - Shehaz S. Khan, Grant Liu, Bing He, Krishna Neeraj, Anis Mhallaoui, Andrea Joubert	Online: Investigating the Impact of COVID-19 Pandemic on Education by Learning Analytics - Keisuke Abe, Kai Cheng	Online: Optimized Block-C Clustering IoT Clustering and Blockchain Sharing Strategy Using Deep Reinforcement Learning - Tianyi Chen, Lin He, Lihua Wu, Xiaodong Wang	
15:10 – 15:30	Coffee Break (Golden Pavilion Room)				
15:30 – 15:50	Session D2P-E (Golden Pavilion Room)	Session D2P-F (Sapphire Room)	Session D2P-G (Jade Room)	Session D2P-H (Ruby Room)	
15:50 – 16:10	CyberSciTech D Detecting Characteristic Points in Bleeding Cycles using FCMW Radar with Spline as Reference - Haidan Wang, Wald Pothier, Jiamia Mi, Muxin Mi, Alex Qi	PICom B (Session Chair: Claudio Miceli, Federal University of Rio de Janeiro, Brazil) Aggregating IoT Applications from Monocentric to a Modular Approach Based on the IoT/5G Middleware: Scenarios and Analysis - Jalak Maji, Krzysztof Tomczak, Przemyslaw Zelazny	EDCSA/ADSN (Session Chair: Junichi Funasaka, Hiroshima City University, Japan) Smart Parking: Detecting a Smart Space from an Angled Viewpoint - Jun Leun, Karim, Aki Yoshizawa, Masami Mochizuki, Ryo Ryo, Shigehi Ham, Francis Jamin Alagon, Stephanie Vitoriano, Cheryl Mae Vilante, Steve Car, Amel Zanjaly, Edoardo Sartori	CyberSciTech E Online: Network Intrusion Detection Algorithms Based on LightGBM Model and Improved Particle Swarm Optimization - Yican Geng, Haiyang He, Zhouxin Ge, Zhihao Lan	
16:10 – 16:30	Autonomous Decision-Making in Roundabouts Using Deep Reinforcement Learning and Heuristic Rules - Hakuu Zhang, Weidong Han, Haoping Shi, Hongyan Feng, Jun Hu	A Computer Vision Approach for Path Planning in Mobile Robots - Federico Fausto Sartori, Corrado Santoro, Miriana Russo, Claudio Guerri	Modeling Routing Protocol for DTN based on Road Network Density - Kazuma Matsubara, Naohiro Hayashibara	Online: Improving Example Quality in Block Box Head Label Text Adversarial Attacks - Dayu Xu, Pengzhou Wang, Qianru Lu	
16:30 – 16:50	Fast Heat Detection Based on Contrast Learning and Cascading Attention - Fu Li, Hui Zhang, Zhihua Liu, Shuang Wang, Beishi Kawata, Juan Zhao, Jinhua Shi, Dehua Guo	Reducing the Influence of Individual Variability in fEMG-Based Fatigue Detection Using Transfer Learning - Ranwei Liu, Wang Wang, Beishi Kawata, Juan Zhao, Jinhua Shi, Dehua Guo	Early Detection of Lateral Dynamics Overheating Through Frequency Analysis of Time-Series Data - Masaki Aida, Kazuki Nakagawa, Otsa Takano	Online: Model Uncertainty Based Unsupervised Real-Time DDT Detection in Network Traffic Classification - Mingyao Chen, Pan Liu, Yanguan He, Xunlian Chen	
16:50 – 17:10	Online: Improved YOLOv5 for Pavement Patch Detection Using Informative Convolution and Bidirectional Feature Pyramid Network - Xiaoguo Wu, Bi Huang, Fei Dai, Shuai Wang, Xinzhao Chai, Yuhao Dong	Online: Multimodal Emotion Recognition Through Distributed Multi-Agent Digital Twin Environment - Federico Fausto Sartori, Corrado Santoro, Miriana Russo, Giovanni Campari	Bernardi's Paradox in Vertical Handover: A Probabilistic Analysis - Kenta Fukuhara, Sumiko Miyata, Masaki Aida	Online: Privacy Computation Based on Digital Decomposition for IoT Cloud Environments - Zhaolong Li, Yinyao Chen, Pan Liu, Xinshou Chai, Yan Liu, Yanguan He, Yungui Guo	
17:10 – 17:30	Online: Privacy-Preserving Memory Forensic Scheme for Linux Systems Based on Containerization Technology - Ruihao Chen, Hu Li, Qingen Liu, Hui Lu	Traffic Prediction by Integrating Multi-Cycle Features and Spatio-Temporal Correlations - Luyang Ni, Benming Huang, Lu Tu	Online: Healthiness Adversarial Patch for Evading IoT Detectors Based on Sensitivity Maps - Ce Wang, Qianru Lu	Online: Range Proof-Based Noise Filtering Mechanism for IoT Differential Privacy - Jiang Wu, Yuhang Chen, Yan Liu, Zhaolong Li, Yang, Fei Dai	
17:30 – 17:50	Lunch Break (Sea Breeze Café)				
17:50 – 18:30	Session D3P-A (Golden Pavilion Room)	Session D3P-B (Sapphire Room)	Session D3P-C (Jade Room)	Session D3P-D (Ruby Room)	
18:30 – 19:00	Integrated Evaluation System for Intelligent Model - Xizhi Yang, Zhihao Lan	Traffic Classification for Network Mining Using Machine Learning Techniques - Giselle Goto, Claudio Miceli de Farias, Felix Gonzalez Delgado	DASC B (Session Chair: Naohiro Hayashibara, Kyoto Sangyo University, Japan) Maximum Likelihood Prediction in Software Reliability Assessment - Tadayoshi Doti	CyberSciTech K Online: A Graph Neural Network with Imbalance-Aware Mechanism for Enhanced Fraud Detection - Yuhao Chen, Binbin Zhou, Zhenzhen Zhang, Jiamia Mi	
19:00 – 19:20	Deep Knowledge Tracking Model Integrating Multiple Feature Personalization Factors - Yuhao Wang, Xinlian Xu, Fanjun Wang	DICE: Distributed Code Generation and Execution - Kunal Rai, Giuseppe Corvetti, Simul Chakrabarti	A Novel Framework of Combating on Water Pipeline Networks by Node Embedding Approach - Alvinia Mustafa Rukmi, Ari Mahendranthi, Ahmad Hafid, and Muhammad Jethi Prasetya	Online: Chinese Named Entity Recognition in Industry Domain Based on Lexical Expansion - Jinghui Zhao, Cuihan Liu, Chuan Lu, Zhenzhen He, Jieqing Ren, Zhang Yu, Qing	
19:20 – 19:40	Analysis of Business Model of Co-Creation Digital Twin City Using Evaluation Game - Kaho Kinoshita, Noriaki Kariyama	Projected Quantum Kernel for IoT-Base Data Analysis - Francesco D'Amore, Luca Mariani, Carlo Mastrorilli, Jacopo Salino, Andrea Vio	A Narrative, Efficient and Private Future: Realizing Privacy-Preserving Machine Learning Through Hybrid Homomorphic Encryption - Noha Nagwan, Manjusha Bhatnagar, Gagan Pratap Singh, Bhawar Khan and Jitendra Malhotra	Online: Self-Organizing and Subject-Specific Emotion Recognition Across Video Stimuli Using EEG Signals - Zhiyong Huang, Ao Guo, Jiamia Mi	
19:40 – 19:50	Online: Predicting Personal Exposure to PM2.5 Using a Network of Stationary and Wearable Air Quality Monitors - DK Arinola	Online: Prediction of Personal Exposure to PM2.5 Using a Network of Stationary and Wearable Air Quality Monitors - DK Arinola	Learning Graphs as A Enhanced Automated Vulnerability Scoring - Sreyashi Lal Mishra and Andrea Pugliese	Online: DeepBlock Analysis of Microservice Systems with Bounded Buffers - Li Yang, Bi-Huang Xinshou Chai, Guo Lu, Xiaoguo Wu, Fei Dai	
19:50 – 20:10	Online: Feature Extraction Model for Surveillance Systems Using Drone Imagery - Jiahua Chen, Yuyang Lei, Kang-Hyun Jo	Online: Human-Centric Based Energy and Comfort Optimization in Cognitive Buildings: A Review - Vimalraj Khan, Antonio Guerri, Franco Ciccarelli, A. Stephen McGroarty, Giandomenico Spagnuolo	Towards cryptographic agility manifests in end-to-end encryption systems: a position paper from the perspective of crypt-consumers - Andrei Sibozov and Laurence Hennessy	Online: Privacy-Preserving Access-Inductive Authentication Framework and Implementation - Wenqin Chen, Jinqian Zuo, Shuai Bu, Chi Chen	
20:10 – 20:30	Coffee Break (Golden Pavilion Room)				
20:30 – 20:50	Session D3P-E (Golden Pavilion Room)	Session D3P-F (Sapphire Room)	Session D3P-G (Jade Room)	Session D3P-H (Ruby Room)	
20:50 – 21:10	IoT-Life Analyzing the Impact of Effect Sounds on Real-World Human Emotions and Behaviors by Adding Effect Sounds to Human Actions - Xin Tang	PICom D (Session Chair: Claudio Miceli, Federal University of Rio de Janeiro, Brazil) Online: Network-Based Analysis of Alzheimer's Disease Using ACNE-Derived Synthetic Connections - Carmela Corallo, Annalisa Biolotto	Cyber-IoT/BigCyberSecurity Delay-Tolerant Computation Offloading in Vehicular Networks Based on Local Blockchain - Xin Liu, Rui Wang, Rui Xing, Dongyan Liu, Fangfang Zhang, Li Bin	CyberSciTech L Online: Node Betweenness Centrality Based Defense Strategy Against Topology Inference Threat: A Static Game Theoretical Perspective - Wenhe Zhang, Yu Jiang, Zhiqiang Yang, Chenxi Zhuanxin, Yantao Sun, Shan Su, Zhiyao Tai, Yan Li	
21:10 – 21:30	Impacts of Internet of Things (IoT) on Invasive Rodent Frequency and Invasive Predator (PI) in Business Continuity (BC) and Disaster Recovery (DR) - Nehal Kumar Agarwal, Gurjinder Singh Batra, Dhruvik Mukeshchandra Patel, Esam S. Abdellatif	Online: Design and Implementation of a Flexible Mobile IoT Middleware for Multi-Protocol Wireless Connectivity - Tatiana Ramirez, Luis Eduardo Tavares Rios, Milena Cavalcanti, Laércio Lucchesi, Markus Endler	Online: Integrated Sensing and Communication for UAV Detection: A Reinforcement Learning-based - Yu Su	Online: An Approach to Detecting Reentrancy Vulnerabilities in Interacting Smart Contracts Using Model Checking - Xinshou Chai, Bi Huang, Ning Liu, Guo Lu, Xiaoguo Wu, Fei Dai	
21:30 – 21:50	A New Smart Glasses Based Dual Authentication System via Signature Image Recognition Handwriting Behaviors Identification - Jiaojiao Gu, Bin Guo, Bin Guo	Online: A Deep Learning Based Digital Twin for Indoor Temperature Prediction in Smart Buildings - Mi, Babu Ishani, Antonio Guerri, Raffaele Giordano, Giancarlo Todini	Online: Trust Evaluation and Concept DRL-Based Approach for Dynamic APT Evasion Detection - Han Liu, Baoyu An, Mengde Yu, Sreyashi Lal Mishra, Zhiyong Huang	Online: Enhancing Adversarial Patch Effectiveness for Face Recognition Systems Using Sharpness-Aware Minimization - Wu Chenyu, Zhang Zhiyuan, Li Zhihao Lan	
21:50 – 22:10	Investigating Decentralized Management of Wearable Device Data for Health and Fitness - Tao Zhou, Tianhe Hu, Hong Chen	Online: Anomaly Identification and Classification of Network Traffic Using Optimized Machine Learning Approach - Mihailina Krasavichina, Pratyaksha Singh	Age of Information Dependent Grant-Free Communication - Yueshan Wang, Kai Zhang, Yilun Wu, Weilin Song, Jian Tang	Online: Improved Multi-Objective Simulated Annealing Particle Swarm Algorithm for Sizing and Capacity Sizing of Distributed Power Supplies - Hou Sun, Chaochen Wen, Chunli Shi, Fei Lu, Qingqiang Fu, Pengcheng Li	
22:10 – 22:30	Online: Analyzing Eye Movements of Drivers with Varying Levels of Experience During U-Turn Segment - Haopu Wang, Yuhao Wang, Yuhao Zhu, Jun Wang, Bo Wu	Online: Identifying Emerging Research Topics in Computer Science Using DeepLearning Community Network Graph-Based Network Prediction Graphs - Constantino Santos, Christos Christodoulos, Antonio Charamalungos, Nicolas Tagliaro	Duplicate Data Elimination Optimization Strategy Based on Edge Service Management - yonglin pu, Xiaoguo Xu, Lanrong Wu, Weichun Du, Jiong Yu, Ziyang Li	Online: NCAA Bracket Prediction Using Machine Learning and Combinatorial Fusion Analysis - Yaosheng Wu, Frank Heu, Ibrahim Ibrahim, Steffen Marwah, Michael Schroeder, Mohamed Rabouh	
22:30 – 22:50	Online: Analyzing the Imbalance Behaviors of Gorilla Chest-Beating Based on Human Pose Estimation - Yu-Qi Bo, Wu, Chongyang Zhang, Xue Xiong	Online: A Domain Model for Urban Digital Twin - Stephen Haller	Online: Fine-Grained Access Control for Lightweight Data Sharing of UAVs - Haopu Wang, Qitao Xu		
		Gala Dinner (Regency Ballroom)			

Day 3 (Thursday, 11/21)	08:00 – 11:00	Registration (near Golden Pavilion Room)			
	08:30 – 08:50	Session D4A-A (Golden Pavilion Room)		Session D4A-B (Sapphire Room)	
	08:50 – 09:10	CyberSciTech M			
	09:10 – 09:30	DASC: Dynamic-Objects Removal And Clustering For Object Detection - Kwan Kim, Daekyung Kim, Kanghyun Jo			
	09:30 – 09:50	Low-Frequency Injection for Performance Boosting of Image Classification - Minsu Kim, Jonghae Lee, Kang-Hyun Jo			
	09:50 – 10:10	Descriptor Feature Map for Classification - Jonghae Lee, Minsu Kim, Kanghyun Jo			
	10:10 – 10:30	Coffee Break (Golden Pavilion Room)			
	10:30 – 10:50	Session D4A-C (Golden Pavilion Room)	Session D4A-D (Sapphire Room)	Session D4A-E (Jade Room)	Session D4A-F (Ruby Room)
	10:50 – 11:10	A Two-Stage Depression Recognition Model Based on Improved YOLOv5 and Spatio-Temporal CNN-Transformer Network - Jiating Zhou, Qutai Qutai	PICom E (Session Chair: Antonio Guerri, National Research Council of Italy, Italy) Improving the Adaptability of fEMG-Based Gesture Recognition Using Variational Mode Decomposition and Transfer Learning - Han Wu, Fang Wang, Juan Zhao, Beishi Kawata, Jinhua Shi	Online: A Trust Evaluation and Concept DRL-Based Approach for Dynamic APT Evasion Detection - Han Liu, Baoyu An, Mengde Yu, Sreyashi Lal Mishra, Zhiyong Huang	Online: Self-Organizing and Subject-Specific Emotion Recognition Across Video Stimuli Using EEG Signals - Zhiyong Huang, Ao Guo, Jiamia Mi
	11:10 – 11:30	Detection of Involuntary Behaviors Using Human Key Point and YOLOv5 - Weikang Zhang, Antonio Louca P. De Campos, Rosemi M. Hernandez	Online: Anomaly Identification and Classification of Network Traffic Using Optimized Machine Learning Approach - Mihailina Krasavichina, Pratyaksha Singh	Online: Self-Organizing and Subject-Specific Emotion Recognition Across Video Stimuli Using EEG Signals - Zhiyong Huang, Ao Guo, Jiamia Mi	Online: Self-Organizing and Subject-Specific Emotion Recognition Across Video Stimuli Using EEG Signals - Zhiyong Huang, Ao Guo, Jiamia Mi
	11:30 – 11:50	Online: Self-Sovereign Identity Bound to Biometrics - Yoshiko Yasunuma, Masakazu Fujio, Yutaka Nakamura, Kenta Takahashi	Online: Identifying Emerging Research Topics in Computer Science Using DeepLearning Community Network Graph-Based Network Prediction Graphs - Constantino Santos, Christos Christodoulos, Antonio Charamalungos, Nicolas Tagliaro	Online: Self-Sovereign Identity Bound to Biometrics - Yoshiko Yasunuma, Masakazu Fujio, Yutaka Nakamura, Kenta Takahashi	Online: Self-Sovereign Identity Bound to Biometrics - Yoshiko Yasunuma, Masakazu Fujio, Yutaka Nakamura, Kenta Takahashi
	11:50 – 12:20	Closing Ceremony (Golden Pavilion Room)			
	12:20 – 13:00	Conference Organizational Meeting			