IEEE CITS 2025

2025 International Conference on Computer, Information and Telecommunication Systems

Colmar, France
July 16-18, 2025

Technical Sponsors:

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CITS 2025 General Chairs' Message

Welcome to the 2025 International Conference on Computer, Information, and Telecommunication Systems (CITS 2025). This year's conference marks the 14th anniversary of CITS, which is being held on an annual basis.

CITS 2025 offers a unique forum for researchers and practitioners from academia, industry, business, and government to share their expertise, results, and research findings in all areas of Computer, Information, and Telecommunication Systems.

This year's conference includes an outstanding technical program and several distinguished keynote speakers. The conference will be held in Colmar, France.

CITS 2025 technical program consists of several technical tracks. Each track consists of several sessions of top-quality papers. The topics covered in the program include, Artificial Intelligence (AI), machine learning, data analytics/science, cybersecurity, computer networks, wireless networks, wireless sensor networks, IoT, telecommunications, information security, cell network systems, parallel and distributed computing, real-time systems, modeling and simulation, performance evaluation, digital signal processing, image processing, pattern recognition, multimedia systems and video processing, neural networks, deep learning, security and information assurance, and E-Systems, among others.

This year, we received a large number of quality papers. Only very high-quality papers have been accepted. The acceptance ratio is about 49.3%. This is indicative of the diligent work of the senior program chair, program committee chairs, technical program committee members, and reviewers. The accepted papers come from all over the World with representation from academia, industry, business and government. Moreover, accepted papers will appear in IEEE Xplore and SCOPUS.

Many individuals have contributed to the success of this high-caliber international conference. Our sincere appreciation goes to all authors, including those whose papers were not included in the program. Many thanks are also due to our distinguished keynote speakers and tutorial instructors for their valuable contribution to the conference.

Special thanks are also due to the senior program chair, Prof. Petros Nicopolitidis, for his outstanding role in leading the technical program efforts. Thanks are also due to the other program chairs. Many thanks also go to the technical program committee members and reviewers for their timely work and efforts.

Many thanks to Prof. Kuei-Fang Hsiao for her great role as a Registration Chair and Executive General Chair.

Special thanks go to the publication chair, Prof. Yu Guo, for his wonderful work and dedication. Thanks to our dedicated Webmaster, Prof. Antonio Bueno, for his great and reliable work. Special thanks go to the international publicity committee members and international liaisons for their excellent work.

Special thanks are due to the international steering committee of the CITS. Thanks to the leaders, faculty, staff, and students of the University of Haute Alsace for hosting the Conference and for putting the resources of the University at the disposal of the Conference.
We also like to thank the IEEE Communication Society for technical co-sponsorship of the conference.

Finally, on behalf of the 2025 IEEE International Conference on Computer, Information and Telecommunication Systems (CITS 2025), we invite all of you to enjoy the program and your stay in the beautiful city of Colmar.

Mohammad S. Obaidat, General Chair, Life Fellow of IEEE, Fellow of AAIA, Fellow of FTRA, Fellow of AIIA, and Fellow of Society for Modeling & Simulation International (SCS), Past President of SCS, Founding Editor in Chief, Wiley Security and Privacy Journal, Editor in Chief, International Journal of Communication Systems, Recipient of SCS Hall of Fame Award, Recipient of the Technical Achievement Award from IEEE ComSoc-Technical Committee on Communication Software

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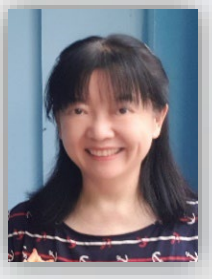

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Prof. Yu Guo

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Program At a Glance

All Times Listed here are Based on France Local Time

Wednesday, July 16		Thursday, July 17		Friday, July 18	
9:00-9:15	Opening Session	9:30-10:15	Keynote Speech 5	9:00-10:45	Security 2
9:15-10:00	Keynote Speech 1	10:15-11:00	Keynote Speech 6	10.45-11:15	Closing Session
10:00-10:45	Keynote Speech 2	11:00-11:15	Coffee Break		
10:45-11:00	Coffee Break	11:15-12:45	Networking 2		
11:00-11:45	Keynote Speech 3	12:45-13:30	Lunch		
11:45-12:30	Keynote Speech 4	13:30-14:45	Information Technology 1		
12:30-13:15	Lunch	14:45-16:15	Information Technology 2		
13:15-14:45	Telecommunication Systems	16:15-16:30	Coffee Break		
		16:30-18:00	Computer Systems		
14:45-15:00	Coffee Break	18:00-19:30	Security 1		
15:00-16:00	Tutorial	20:30	Dinner		
16:00-17:30	Special Session: Emerging Trends in AI-Driven Cybersecurity for Next-Gen Applications				
17:30-19:00	Networking 1				

Schedule

Wednesday, July 16

Daily Program Chair: Pascal Lorenz

9:00 - 9:15

Opening Session

9:15 - 10:00

Keynote Speech 1

Resource Allocation and Scheduling in the Mist-Fog-Cloud Continuum
Session Chair: Petros Nicopolitidis

Distinguished Keynote speaker: Helen Karatza

The rapid growth of Internet of Things (IoT) applications has exposed the limitations of traditional cloud computing in managing the vast volumes of data generated by IoT devices and sensors. To address this issue, Fog and Mist computing models have emerged to reduce transmission latency. Fog computing extends cloud capabilities to the network edge, bringing computational resources closer to data sources, thus meeting the strict low-latency requirements. Mist computing, a variation of fog computing, further minimizes latency by placing computational resources even closer to the IoT layer. Due to the inherently time-dependent nature of most IoT applications and their stringent deadline constraints, the implementation of efficient scheduling algorithms is crucial for ensuring the timely execution of tasks and optimizing performance within the mist-fog-cloud continuum. This talk will delve into advanced strategies for tackling the challenges associated with resource allocation and task scheduling in real-time IoT applications across cloud, fog, and mist computing environments, while also exploring emerging trends in this field.

Bio

Helen Karatza (senior member of IEEE, ACM, SCS) is a Professor Emeritus in the Department of Informatics at the Aristotle University of Thessaloniki, Greece. Dr. Karatza's research interests include cloud, fog and mist computing, energy efficiency, fault tolerance, resource allocation, scheduling algorithms and real-time distributed systems. Dr. Karatza has authored or co-authored over 260 technical papers and book chapters including seven papers that earned best paper awards at international conferences. She served as an elected member of the Board of Directors at Large of the Society for Modelling and Simulation International. She served as chair and keynote speaker in international conferences. Dr. Karatza is Senior Associate Editor of the Elsevier journal “Simulation Modelling Practice and Theory”, an Editor of “Future Generation Computer Systems” of Elsevier, an Associate Editor of IEEE Transactions on Services Computing and an Editorial Board member of Cluster Computing of Springer. She was Editor-in-Chief of the Elsevier journal “Simulation Modelling Practice and Theory”, Editor-in-Chief of “Simulation Transactions of The Society for Modelling and Simulation International”, Associate Editor of “ACM Transactions on Modelling and Computer Simulation” and Senior Associate Editor of the “Journal of Systems and Software” of Elsevier. She served as Guest Editor of multiple Special Issues in international journals. More info about her activities and publications can be found at: https://karatza.webpages.auth.gr/

10:00 - 10:45

Keynote Speech 2

Beyond the Algorithm: Symbolic Reasoning and Programmable Matter for the Next Generation of Intelligent Systems
Session Chair: Helen Karatza

Distinguished Keynote speaker: Jaafar Gaber

As computing moves beyond traditional algorithmic boundaries, new paradigms are emerging that integrate logic, structure, and physical embodiment. This keynote explores the convergence between symbolic reasoning and programmable matter as a foundation for the next generation of secure and intelligent systems. We discuss how combining interpretable AI with reconfigurable substrates, such as modular robotics, shape memory alloys, and adaptive materials, can enable systems capable of autonomous reconfiguration, embodied decision-making, and explainable behavior. By bridging computation and physical transformation, this talk offers a vision for systems that are not only smart in code, but also intelligent in form. This keynote explores how symbolic reasoning, and programmable matter can jointly support the next generation of intelligent systems. By bridging logic-based AI with reconfigurable physical substrates, we envision secure, adaptive, and explainable architectures. Examples include modular robotics and shape memory materials enabling embodied intelligence.

Bio

Jaafar Gaber received his Ph.D. degree in 1998 from University of Lille I, France in Computer Science and engineering. He is currently researcher at the FEMTO-ST institute (UMR CNRS 6174) and associate Professor HDR of computer science and computer engineering at Université Marie et Louis Pasteur-UTBM, France. Prior to joining UTBM, he was a research scientist at CSI Institute at George Mason University in Fairfax, Virginia, USA. His research interests include modern distributed systems, high-performance computing, reconfigurable computing, AI and programmable matter. He has served as an external expert for research and technology evaluation outside the EU or as an expert for different EU calls and actions. His research has been frequently supported by European grants within EU FP6, EU FP7, EU EACEA agency, and industry. He is a member of the IEEE and ACM.

10:45 - 11:00

Coffee Break

11:00 - 11:45

Keynote Speech 3

Federated Unlearning and Its Applications
Session Chair: Aya Ahmed

Distinguished Keynote speaker: Pengfei Wang

Federated Unlearning Technology is a key development in the field of federated learning. Its main goal is to remove the influence of a specific user's data from a trained model without retraining it from scratch. This supports data privacy and complies with regulations such as the "right to be forgotten." While current federated unlearning methods often assume cooperative users and controlled environments, real-world deployments are far more complex. They may involve uncooperative participants, adversarial behaviors, or simultaneous unlearning requests from multiple users—challenges that are insufficiently addressed in existing literature. I will begin with a brief introduction to federated unlearning, followed by an explanation of algorithms designed for real-world scenarios. I will also discuss practical applications of federated unlearning. Related work has been published in top-tier journals and conferences, including IEEE Transactions on Mobile Computing (TMC), IEEE Journal on Selected Areas in Communications (JSAC), and IEEE Transactions on Services Computing (TSC), and etc.

Bio

Pengfei Wang is currently a tenured Associate Professor at the School of Computer Science and Technology, Dalian University of Technology (DUT), China. He has authored over 70 papers published in top-tier journals and conferences, including TMC, TON, JSAC, TSC, TWC, TITS, TOSN, TNNLS, INFOCOM, and IJCAI. His research focuses on distributed artificial intelligence, federated unlearning, and the Internet of Things (IoT). He is a member of IEEE and ACM, and senior member of CCF. He joined the Dalian University of Technology after receiving a Ph.D. in Software Engineering from Northeastern University, Shenyang, China. From 2016 to 2018, he was a visiting Ph.D. student in Networks Group at Northwestern University, Evanston, IL.

11:45 - 12:30

Keynote Speech 4

Robust and Secure Authenticated Solutions for Contemporary and Critical Infrastructures

Session Chair: Jaafar Gaber

Distinguished Keynote speaker: Khalid Mahmood

As digital transformation accelerates across industries, the need for robust and secure authenticated solutions becomes paramount—especially for contemporary and critical infrastructures such as IoT ecosystems, healthcare systems, and smart grids. In this keynote, Dr. Khalid Mahmood will explore the latest advances in designing lightweight, scalable authentication protocols and secure communication frameworks tailored to the needs of these complex environments. Highlighting real-world threat scenarios, including ransomware, APTs, and IoT-targeted attacks, the talk will delve into the application of cryptographic techniques, AI-powered anomaly detection, and blockchain-based security models that ensure both resilience and responsiveness. Attendees will gain insight into emerging trends, common vulnerabilities, and practical strategies for protecting next-generation digital infrastructure. Through case studies and recent research, this session aims to equip participants with actionable knowledge to enhance security posture and operational continuity in an increasingly interconnected world.

Bio

Dr. Khalid Mahmood is an accomplished academic and researcher specializing in cybersecurity, cryptographic protocols, and secure communication systems. Currently serving as an Assistant Professor in the Future College at the National Yunlin University of Science and Technology in Taiwan, Dr. Mahmood brings over a decade of experience in both academia and industry, with a strong focus on developing secure, innovative solutions for critical infrastructure systems, such as IoT, smart grids, and healthcare networks.

12:30 - 13:15

Lunch

13:15 - 14:45

Telecommunication Sysatems

Session Chair: Zakariya Ghalmane

Precoding Algorithms for IRS Assisted MIMO Networks
Siyumie S Wijesinghe, Charalampos C. Tsimenidis and Shahid Mumtaz (Nottingham Trent University, United Kingdom (Great Britain))

BPSK/BFSK Error Probability Analysis of Best Relay Selection over α-μ Fading Channels
Mohammed Ali Alqodah and Mustafa Muhammad Matalgah (University of Mississippi, USA); Ali A. Al-Sharadqah (California State University at Northridge, USA)

Realistic Modelling and Optimization of DTLS Handshakes in Constrained LPWAN Environments
Anu Sathyajith Mathew and Axel Sikora (University of Applied Sciences Offenburg, Germany)

Adaptive Proximal Policy Optimization for Efficient and SLA-Compliant Dynamic O-RAN Slice Resource Allocation
Nokwanda Shezi (Durban University of Technology (DUT), South Africa); Bakhe Nleya (Durban University of Technology, South Africa); Noemí Merayo and Juan Carlos Aguado (Universidad de Valladolid, Spain)

14:45 - 15:00

Coffee Break

15:00 - 16:00

Tutorial

A Tutorial on Integrating Quantum Security in 6G Communication Systems
Session Chair: Zakariya Ghalmane

Instructors: Abdullah Aydeger and Engin Zeydan

The tutorial focuses on the convergence of quantum threats in the domain of 6G networks. It aims to provide an in-depth study of this convergence, starting with background information on quantum attacks, post-quantum cryptography, and quantum key distribution. It will then explore its execution to 6G networks and their quantum-based threats. The tutorial will include a step-by-step demonstration of two of the demos to illustrate the practical implementation of these concepts. The tutorial is designed for participants with no prerequisite knowledge and aims to introduce them to the application of post-quantum cryptography and quantum key distribution to protect the 6G networks. As this topic is gaining significance and relevance in the telecommunications industry, the tutorial offers attendees the opportunity to learn about cutting-edge security issues for 6G networks and their specific applications from the cybersecurity perspective

Bios

Dr. Abdullah Aydeger is currently an assistant professor at the Electrical Engineering and Computer Science Department at FIT. Prior to joining FIT in August 2022, he was an assistant professor at the School of Computing at Southern Illinois University, Carbondale, since 2020. Dr. Aydeger obtained a Ph.D. Degree in Computer and Electrical Engineering from Florida International University in 2020. His research interests are post-quantum cryptography, network security, and virtualization.

Dr. sEngin Zeydan received a PhD degree in February 2011 from the Department of Electrical and Computer Engineering at Stevens Institute of Technology, Hoboken, NJ, USA. Since November 2018, he has been with the Services as Networks (SaS) Research Unit of the CTTC working as a Senior Researcher. He was a part-time instructor at Electrical and Electronics Engineering department of Ozyegin University Istanbul, Turkey between January 2015 and June 2018. His research areas include data engineering/science for telecommunication networks and network security

16:00 - 17:30

Special Session: Emerging Trends in AI-Driven Cybersecurity for Next-Gen Applications
Session Chair: Aparna Kumari

Anomaly and Malware Detection in IoT Networks
Kevser Ovaz Akpinar (Rochester Institute of Technology at DUBAI, United Arab Emirates); Qusai Hasan and Sahar Abdelbasit (Rochester Institute of Technology of Dubai, United Arab Emirates)

Enhanced Fault Detection and Tolerance in Wireless Sensor Networks Using Recurrent Long-Short Function Harmonic Network with Hybrid CNN-LSTM Model
Deepika Bishnoi and Yogesh Chaba (Guru Jambheshwar University of Science and Technology, India)

ZTSec-FedSDN: A Privacy-Preserving Federated Framework for SDN Attack Detection Using Zero-Trust Blockchain and 6G Terahertz Networks

Ketav S Shah (Institute of Technology, Nirma University, India); Aparna Kumari and Bhavya Solanki (Nirma University, India); Safaa Najah Saud and Asmaa Mahfoud (Management and Science University, Malaysia)

DiabSecure: Federated-TinyML-enabled unified Privacy-Preserving Framework for Diabetes Risk Assessment using Zero-Trust Blockchain

Prince Jayantibhai Tandel, Aparna Kumari and Parshva Shah (Nirma University, India); Sunil Kumar (Guru Jambheshwar University of Science & Technology, Hisar, Haryana, India); Narender Kumar, Suman Ghanghas and Jyotsana Sardana (Guru Jambheshwar University of Science & Technology, India)

17:30 - 19:00

Networking 1

Session Chair: Abdelhafid Abouaissa

Performance Evaluation of Concatenated Rate Splitting Multiple Access for 6G Multiuser Communication System

Aya Khalid Ahmed (Brunel University of London, United Kingdom (Great Britain)); Hamed Saffa Al-Raweshidy (University of Brunel, United Kingdom (Great Britain))

Reinforcement Learning-Driven UC-CFmMIMO for UAVs: A Subband Allocation Framework

Selina Cheggour (University of Lille, CNRS - IEMN, France & Inria, France); Aymen Bouferroum (Inria, France); Rahul Krishnan (Adi Shankara Institute of Engineering and Technology, India)

Optimizing Next Generation Wireless BAN with Prioritized Access for Heterogeneous Traffic

Shama Siddiqui (South East Technological University, Ireland); Indrakshi Dey (South East Technological University, Waterford, Ireland)

Next-Generation MAC Technique for Priority Handling in Industrial Cyber-Physical Systems

Anwar Ahmed Khan (South East Technological University, Ireland); Farid Nait-Abdesselam (Université Paris Cité, France); Indrakshi Dey (South East Technological University, Waterford, Ireland)

Thursday, July 17

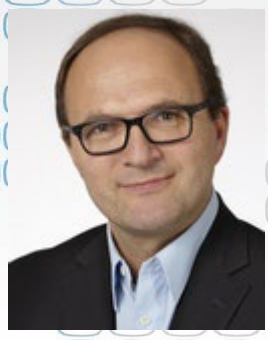
Daily Program Chair: Abdelhafid Abouaissa

9:30 - 10:15

Keynote Speech 5

Heterogeneous Real-Time & Secure Networks: Integrating Ethernet, WiFi, and Campus-B5G Networks

Session Chair: Jaafar Gaber



Distinguished Keynote speaker: Axel Sikora

In these days, industrial communication comes with manifold requirements: (1) the different wired and wireless network types need to be much more integrated and managed in a unified way, (2) they need to be real-time, i.e. following the vendor independant Time-Sensitive Networking (TSN) approach, and (3) they must be secure, i.e. following the state-of-the-art technologies, like Transport Layer Security (TLS) protocols. A lot of research is currently executed on these three directions. However, the real challenge begins, if all these objectives have to be followed in a combined approach.
The keynote presentation gives an overview on the current state of the art and discusses open research questions. In addition, it discusses the trade-off between the different objectives and presents some approaches to combine the different research directions.

Bio

Dr. Axel Sikora is an associate professor at Offenburg University, Germany, where he serves as Scientific Director of the Institute of Reliable Embedded Systems and Communication Electronics, a leading R&D institute for IIoT connectivity solutions. He is also deputy director of Hahn-Schickard Association of Applied Research, where he manages the division “Software Solutions”, including several research groups around AI.
Dr. Sikora is also engaging in several standardization activities around secure and efficient IIoT connectivity. Since many years, he is serving as chairman of the embedded world Conference, the world's largest event on the topic. In parallel, he is engaged in some deep-tech spinoff companies.

10:15 - 11:00

Keynote Speech 6

Geo-Distributed Microservice Execution: Opportunities and Challenges

Session Chair: Jaafar Gaber

Distinguished Keynote speaker: Habib Mostafaei

Microservice architectures and service meshes have become foundational to modern cloud-native systems, yet they now face unprecedented demands for scalability, resilience, and responsiveness. As applications grow increasingly global, service providers are moving beyond single-region deployments, pushing microservices closer to users across the globe through multi-cluster service mesh environments. This evolution promises dramatic performance gains—but also introduces complex challenges, from inter-cluster latency to the need for intelligent, dynamic coordination across replicas.
In this talk, I will present our innovative adaptive, latency-aware load-balancing mechanism that paves the way for the multi-cluster service meshes. Beyond this mechanism, we will explore a broader

landscape of emerging technologies and approaches that pave the way toward fully autonomous, geo-distributed microservice platforms—systems capable of making real-time decisions to meet application-level goals, minimize latency, and ensure dependable performance at planetary scale.

Bio

Habib Mostafaei received the Ph.D. degree in computer science and engineering from Roma Tre University, Italy, in 2019. From 2009 to 2015, he was a full-time Faculty Member at the Computer Engineering Department, Azad University. He is currently an Assistant Professor of computer science at Eindhoven University of Technology. Before, he was a Post-Doctoral Researcher at Technical University Berlin (TU Berlin), Germany, where he was involved in the BIFOLD-BBDC project from 2019 to 2022. He has been actively involved in the research community as a member of the Technical Program Committee (TPC) for several prestigious international conferences and also serves on the Editorial Board of various journals. His current research focuses on networked systems, network management, and distributed systems, and is funded by EU ChipsJU and Intel.

11:00 - 11:10

Coffee Break

11:10 - 12:40

Networking 2

Session Chair: Petros Nicopolitidis

Study of the Impact of Cooperative Maneuvers Among Different Types of Vehicles in Real-World Scenarios

Bruno Miguel Fonseca Mendes (University of Aveiro, Portugal); Adriano Almeida Goes and Marco Araujo (Capgemini Engineering, Portugal); Daniel Corujo (University of Aveiro & Instituto de Telecomunicações, Portugal); Arnaldo Oliveira (Universidade de Aveiro - DETI / Instituto de Telecomunicações - Aveiro, Portugal)

Beyond NWDAF Services for Comprehensive 5G Network Analytics and Orchestration

Iker Hernández (Fundación Vicomtech, Basque Research and Technology Alliance (BRTA), Spain); Daniel A Mejías (Fundación Vicomtech, Spain); Zaloa Fernández (Fundación Vicomtech, Basque Research and Technology Alliance (BRTA), Spain); Victor Herranz (Teldat, Spain)

AAPS: An Adaptive Aggregated Parameter-Based Protocol for Agricultural Wireless Sensor Networks

Md Saiful Islam Rubel (Laboratoire de recherche Télébec en communications souterraines (LRTCS), Canada); Nahi Kandil (Université du Québec en Abitibi-Temiscamingue, Canada); Nadir Hakem (Université du Québec en Abitibi Témiscamingue, Canada); Mozhan Shirani (Saman Taraz, Iran)

Implementation of the Ascon Encryption Algorithm for Secure Industrial IoT Networks

Erich S Ellsworth, Daniyar Boztayev, Priyan Dharmeshkumar Shah, Liam Quinn and Semih Aslan (Texas State University, USA)

12:40 - 13:30

Lunch

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13:30 - 14:45

Information Technology 1

Session Chair: Semih Aslan

Subway Ridership Forecasting Using Seasonal and Holt-Winters Models with Calendar Effects
Mustafa Akpinar (Higher Colleges of Technology, United Arab Emirates & Sakarya University, Turkey); Usman Durrani (Higher Colleges of Technology, United Arab Emirates); Kevser Ovaz Akpinar (Rochester Institute of Technology at DUBAI, United Arab Emirates); Mohammed Saleh (HCT, United Arab Emirates)

TeleSure: TinyML-Based Framework for Secure UAV Delivery in Telesurgery Systems with 5G
Lakshin Pathak (Nirma University, India); Mohammad S. Obaidat (University of Jordan, USA); Khushi Vasava, Vidhi Ruparelia, Shimoly Shah and Rajesh Gupta (Nirma University, India); Sudeep Tanwar (Nirma University & Institute of Technology, India); Kuei-Fang Hsiao (The University of Jordan, USA)

Image Restoration With Variational Dynamic Memory Net, U-Net And Lnns
Marcus Schulze, Semih Aslan, Harold Stern and Damian Valles (Texas State University, USA)

A canvas-based AI-driven framework supporting SMEs digital transformation roadmap
William Abou Khalil and Oriana Eid (USJ, Lebanon); Maria Sokhn (HES SO, Switzerland & HEG Arc, Switzerland); Rima Kilany Chamoun (Saint-Jospeh University, Lebanon & USJ-ESIB, Lebanon)

14:45 - 16:15

Information Technology 2

Session Chair: Jaafar Gaber

Detection of Poisoning Attacks in Federated Learning with Non-IID data
Divya Bhatt (University of Oklahoma, USA); Le Gruenwald (USA)

Predicting SoH in Lithium-ion Batteries using a Variational Quantum Neural Network
Alexander Mutiso Mutua, Ruairí de Fréin and Emmanuel Kangogo Kimeli (Technological University Dublin, Ireland)

Explainable Machine Learning for Spatio-Temporal Demand Forecasting in Autonomous Vehicle Fleets
Harun Mohamed Huka and Manar Jammal (York University, Canada)

Load-Adjusted Transfer Learning for Limited Video-on-Demand Data
Emmanuel Kangogo Kimeli and Ruairí de Fréin (Technological University Dublin, Ireland)

16:15 - 16:30

Coffee Break

16:30 – 18:00

Computer Systems

Session Chair: Helen Karatza

Solving Systems of Linear Equations Using In-Memory Computing
Mojtaba Mahdavi (Ericsson, Sweden)

Motor Fault Diagnosis Across Variable Power Using Deep Learning
Enes Bugra Kaya, Semih Aslan, Damian Valles, Sercan Iscan and Anandi Dutta (Texas State University, USA)

Scheduling Gang Jobs with Security Requirements on a Hybrid Cloud
Helen Karatza (Aristotle University of Thessaloniki, Greece)

FPGA based Matrix Multiplication Accelerator
Polash Deb, Semih Aslan and Damian Valles (Texas State University, USA)

18:00 - 19:30

Security 1

Session Chair: Mustafa Al Samara

X-SENSE: Explainable ML-based Intelligent Sensor Environment for Wireless Network Security
Ayushi Shah (Nirma University, India); Divyam Shah and Saumya Shah (Ahmedabad University, India); Rajesh Gupta (Nirma University, India); Sudeep Tanwar (Nirma University & Institute of Technology, India); Jitendra Bhatia (Nirma University, India)

Intelligent Wireless Network Security Framework for Telesurgery Communication Systems in Healthcare 4.0
Yogi Patel (Nirma University, India); Mohammad S. Obaidat (University of Jordan, USA); Khushi Savsani, Rajesh Gupta and Jitendra Bhatia (Nirma University, India); Sudeep Tanwar (Nirma University & Institute of Technology, India); Sahil Sawhney (MIET Jammu, India); Balqies Sadoun (Al-Balqa' Applied University, Jordan)

Enhanced Intrusion Detection System for Securing UAV Networks in Smart Farming Applications
Akshita Patwal (Graphic Era Deemed to Be University Dehradun, India); Gagan Dangwal and Mohammad Wazid (Graphic Era Deemed to be University, India); Ashok Kumar Das (International Institute of Information Technology, Hyderabad, India); Balqies Sadoun (Al-Balqa' Applied University, Jordan); Devesh Pratap Singh (Graphic Era University, India)

Detection of Eavesdropping Attacks in a Noisy Quantum Channel Using k-Means Clustering: A Case Study of BB84 Protocol
Muhammad Idham Habibie (TU Dresden, Germany); Khondaker M Salehin (University of Portland, USA)

20:30

Dinner

Friday, July 18

Daily Program Chair: Petros Nicopolitidis

9:00 - 10:45

Security 2

Session Chair: Mustafa Al Samara

Smart Contract-Enabled Land Registration: Ensuring Secure Buying and Selling with Mutual Authentication

Neeraj Kumar (National Institute of Technology Hamirpur, India); Rifaqat Ali (National Institute of Technology Hamirpur, HP, India); Mohammad S. Obaidat (University of Jordan, USA); Balqies Sadoun (Al-Balqa' Applied University, Jordan)

Machine Learning-Envisioned Mechanism for Phishing Attack Identification Through URLs

Mukesh Bhandari (Graphic Era Deemed to Be University Dehradun, India); Ishita Tomar, Anshu Gupta, Ishita Singh and Dashpreet Singh (Graphic Era Deemed to Be University Dehradun, India); Saksham Mittal (Graphic Era Hill University Dehradun Uttarakhand, India); Mohammad Wazid (Graphic Era Deemed to be University, India)

Blockchain based Decentralized Micro-loan Management Platform for MSME

Dwivedi Sanjeev Kumar (Pandit Deendayal Energy University (PDEU) Raisan Gandhinagar Gujarat India, India); Ruhul Amin (IIIT Naya Raipur, India); Adesh Pandey (KIET Group of Institutions, India); Hardev Singh Pal (Madhav Institute of Technology & Science, Deemed University (MITS-DU), India); Balqies Sadoun (Al-Balqa' Applied University, Jordan)

Exploring Blockchain in the Metaverse: Review of State-of-the-Art Frameworks and Future Research Challenges

Anshika Pandey (Madhav Institute of Technology & Science, Deemed University (MITS-DU), India); Akriti Kushwaha (Madhav Institute of Technology & Science, Deemed University (MITS-DU), India); Dwivedi Sanjeev Kumar (Pandit Deendayal Energy University (PDEU) Raisan Gandhinagar Gujarat India, India); Ruhul Amin (IIIT Naya Raipur, India)

Attendance System Based on Face Recognition

Pablo David Minango, Sr (Instituto Tecnológico Superior Rumiñahui, Ecuador); Juan Minango Negrete (Instituto Tecnológico Superior Rumiñahui, Ecuador & Instituto Tecnologico Universitario Ruminahui, Ecuador); Marcelo MZ Zambrano Vizuete and Wladimir WP Paredes Parada (Instituto Tecnológico Superior Rumiñahui, Ecuador)

10:45 - 11:15

Closing Session