		ISORC 2024 Technical Program Schedule
		DAY 1: MAY 22, 2024
08:00	08:30	**Welcome Desk**
08:30	08:40	**Opening Ceremony**
		Wireless communication networks (Session chair: Nedra Mellouli)
08:40	09:00	**Paper #66 Performance Evaluation of LoRaWAN Propagation Models for Large-Scale IoT Deployments**	Marwa SAID, University of Tunis El Manar, Tunisia Karim HOUIDI, University of Tunis El Manar, Tunisia Akram HAKIRI, University of Pau & Pays de l'Adour, France Nedra MELLOULI, University of Paris 8, France Hella KAFFEL, University of Tunis El Manar, Tunisia
09:00	09:20	**Paper #47 Preventing Order Inversion within Function-as-a-Service for Sensor Networks**	Takashi Ikegami, National Institute of Informatics, Japan Ichiro Satoh National Institute of Informatics, Japan Tatsuo Nakajima, Waseda University, Japan
09:20	09:40	**Paper #26 Variable Neighborhood Search-based Resource Allocation for Vehicle-to-Everything Communications.**	Ibtissem Brahmi, ENET'COM, University of Sfax, Sfax, Tunisia Souhir Elleuch, NTS'COM Research Unit, ENET'COM, University of Sfax, Sfax, Tunisia Monia Hamdi, RTIM, University of Gabes, Tunisia Faouzi Zarai, NTS'COM Research Unit, ENET'COM, University of Sfax, Sfax, Tunisia
09:40	10:00	**Paper #67 Performance Evaluation of Real-Time Localization and Positioning Algorithms for WSNs**	Maher Jabberi, University of Sousse, Tunisia Bassem Sellami, TalTech, Tallinn, Estonia Akram Hakiri, University of Pau & Pays de l'Adour, France Mohamed Adel Alimi, University of Sfax, Tunisia
10:00	10:30	**Coffee Break**
		Embedded & Real-Time Applications (Session chair : Uwe Brinkschulte)
10:30	10:50	**paper #10 Real-Time Embedded Monitoring Technologies in Modern Healthcare Systems: A Survey**	Sree Charitha Meka, George Mason University, USA Sanjana Achan, George Mason University, USA Robert Pettit, George Mason University, USA
10:50	11:10	**paper #29 Towards Lingua Franca on the Patmos Processor**	Ehsan Khodadad, Denmark Technical University, Denmark Luca Pezzarossa, Technical University of Denmark, Denmark Martin Schoeberl, Denmark Technical University, Denmark
11:10	11:30	**paper #87 Architectural Security and Trust Foundation for RISC-V**	Marouene Boubakri, Mediatron Lab, SupCom, University of Carthage, Tunis, Tunisia Belhassen Zouari, Mediatron Lab, SupCom, University of Carthage, Tunis, Tunisia
11:30	11:50	**Paper #13 Dependable Dynamic Real-Time Systems: Examples For The Applicability Of The Simplex Architecture**	Robert Schmid, Hasso-Plattner-Institute, University of Potsdam, Germany Katja Assaf, Hasso Plattner Institute, University of Potsdam, Germany Clemens Tiedt, Hasso Plattner Institute, University of Potsdam, Germany Dirk Friedenberger, Frederic Reiter, Hasso-Plattner-Institut (HPI), Germany Andreas Polze, Hasso-Plattner-Institut (HPI), Germany
11:50	12:50	**Keynote Session : Serge Fdida, Sorbonne University, Title: Future Network reproducibility**
12:50	14:00	**Lunch break (1h30)**

		Blockchain, Reliability and dependability & cloud computing (Session chair: Hella Kaffel)	
14:00	14:20	paper #65 Low latency PBFT parallel consensus for IoT blockchain platform	Rabeb Ben Othmen, CRISTAL Lab, RAMSIS Team, ENSI, University of Manouba Wassim Abbessi, CRISTAL Lab, RAMSIS Team, ENSI, University of Manouba Sofiane Ouni, CRISTAL Lab, RAMSIS Team, ENSI, University of Manouba Wafa Badreddine, University of Picardie Jules Verne Amiens, France Gilles Dequen, University de Picardie Jules Verne Amiens, France
14:20	14:40	paper #81 Towards a participatory cloud infrastructure for hosting services: QoS-aware dynamic orchestration of microservices.	Bruno STEVANT, IMT Atlantique, France Jean-Louis PAZAT, INSA Rennes, France Alberto BLANC, IMT Atlantique, France
14:40	15:00	paper #104 Hierarchical Heterogeneous Cluster Systems for Scalable Distributed Deep Learning	Yibo Wang, University of California, Irvine, USA Tongsheng Geng, University of California, Irvine, USA Ericson Silva, Pontifical Catholic University of Minas Gerais, USA Jean-Luc Gaudiot, University of California, Irvine, USA
15:00	15:20	paper #93 Multivariate LSTM for Execution Time Prediction in HPC for Distributed Deep Learning Training	Tasnim Assali, RAMSIS, CRISTAL laboratory, ENSI, University of Manouba, Tunisia Zayneb TRABELSI AYOUB, RAMSIS, CRISTAL, ENSI, University of Manouba, Tunisia Sofiane OUNI, RAMSIS, CRISTAL laboratory, ENSI, University of Manouba, Tunisia
15:20	15:40	paper #88 Decentralized Identity Management and Privacy-Enhanced Federated Learning for Automotive Systems: A Novel Framework	Biagio Boi, University of Salerno, Italy Marco De Santis, University of Salerno, Italy Christian Esposito, University of Salerno, Italy
15:40	16:00	**Demo paper: Tool Demo: Bridging the Interoperability Gap between UML Tools with XMI Import/Export Support**	**Antonio Rosales Viesca, Texas A&M University, USA** **Mustafa Al Lail, Texas A&M International University, USA** **Omar Alam, Trent University, Canada**
16:00	16:30	**Coffee Break + Demo paper**	
		IoT & applications (Session chair: Pierre-Emmanuel Hladik)	
16:30	16:50	paper #64: An IoT Semantic Web Service For Objects Identifying	Chaima BEJAOUI, LETI Research Lab, National School of Engineers of Sfax, Tunisia Fatma ACHOUR, MIRACL, University of Sfax, Tunisia Nasreddine HAJLAOUI, Applied College, Qassim University, Saudi Arabia Anis JEDIDI, MIRACL, University of Sfax, Tunisia
16:50	17:10	paper #71: Multi-Access Edge Computing: Striking a balance between QoE and Energy Efficiency	Belabed Dallal, Airbus Defence & Space, France
17:10	17:30	paper #83: Analyzing Public Transit Schedule Deviations: A Case Study on Montreal Using Real-Time Data	Emna Boudabous, University of Tunis - El Manar, Tunisia Mohamed Karaa, Ecole de Technologie Supérieure (ETS), Canada Lokman Sboui, Ecole de Technologie Supérieure (ETS), Canada Julio Montecinos, Ecole de Technologie Supérieure (ETS), Canada Omar Alam, Trent University, Canada

| 17:30 | 17:50 | paper #80: Federated Learning Models for Real-Time IoT: A Survey | Karim Houidi, University of Tunis El Manar, Tunisia
Marwa Said, University of Tunis El Manar, Tunisia
Akram HAKIRI, University of Pau and Pays de l'Adour, France
Nédra Mellouli-Nauwynck, University Paris 8, France
Hella Kaffel Ben Ayed, University of Tunis El Manar, Tunisia |
| 17:50 | 18:10 | paper #36: Object Detection Using Convolutional Neural Networks: A Comprehensive Review | Hanen ISSAOUI, National school of Engineers of Gabes, University of Gabes, Tunisia
Asma ElAdel, National school of Engineers of Gabes, University of Gabes, Tunisia
Mourad Zaied, National school of Engineers of Gabes, University of Gabes, Tunisia |

DAY 2: MAY 23, 2024

08:00	08:30	Welcome Desk	

Secure Time Critical Applications (Session chair: Robert G Pettit)

08:30	09:00	paper #50 Securing Real-Time Systems using Schedule Reconfiguration	Zain Alabedin Haj Hammadeh, German Aerospace Center, Germany Monowar Hasan, Washington State University, Germany Mohammad Hamad, Technical University of Munich, Germany
09:00	09:30	paper #44 Multicore DRAM Bank-& Row-Conflict Bomb for Timing Attacks in Mixed-Criticality Systems	Antonio Savino, Federico II University of Naples, Italy Gautam Gala, University of Kaiserslautern-Landau (RPTU), Germany Marcello Cinque, Federico II University of Naples, Italy Gerhard Fohler, University of Kaiserslautern-Landau (RPTU), Germany
09:30	10:00	paper #106 TECS/Rust: Memory-safe Component Framework for Embedded Systems	Nao Yoshimura, Saitama University, Japan Hiroshi Oyama, OKUMA Corporation, Japan Takuya Azumi, Saitama University, Japan
10:00	10:30	coffee break	

Security, Trustworthiness (Session chair: Akram Hakiri)

10:30	11:00	paper #39 Evaluation of Trust Metrics in an Artificial Hormone System	Philipp Homann, Goethe University Frankfurt, Germany Jonas Diegelmann, Goethe University Frankfurt, Germany Mathias Pacher, Goethe University Frankfurt, Germany Uwe Brinkschulte, Goethe University Frankfurt, Germany
11:00	11:30	paper #55 SRAM-PUF Authentication Schemes Empowered with Blockchain on Resource-Constrained Microcontrollers	Mario Barbareschi, University of Naples Federico II, Italy Franco Cirillo, University of Salerno, Italy Christian Esposito, University of Salerno, Italy
11:30	12:30	Keynote Session: Jean-Luc Gaudiot, University of California, Irvine Title: Hardware Security	
12:30	14:00	Lunch break (1h30)	
14:00	18:00	Archaeological site of Carthage & picturesque village of Sidi Bou Said -- 14:00 -- 18:00	
19:00	22:00	Gala Dinner (19:00-22:00)	

DAY 3: MAY 24, 2024

08:00	08:30	**Welcome Desk**

Intrusion Detection (Session chair: Mathias Pacher)

08:30	09:00	**paper #24 Intrusion Detection Schemes Based on Synthetic Minority Oversampling Technique and Machine Learning Models**	Ali Hussein, REGIM-Lab, University of Sfax, ENIS, Tunisia. Maha Charfeddine, REGIM-Lab, University of Sfax, ENIS, Tunisia. Boudour Ammar, REGIM-Lab, University of Sfax, ENIS, Tunisia. Bassem Ben Hamed, systeMs, SM@RTS, University of Sfax, Tunisia.
09:00	09:30	**paper #41 On the Impacts of Shared-Resource Contention on Intrusion Detection Systems based on Performance Monitoring**	Leonardo Passig Horstmann, LISHA, Federal University of Santa Catarina, Brasil Antônio Augusto Fröhlich, LISHA, Federal University of Santa Catarina Marcus Völp, SnT, University of Luxembourg, Luxembourg
09:30	10:00	**paper #43 An Improved Security-Cognizant Scheduling Model**	Fatima Faheem Raadia, Wayne State University, USA Nathan Fisher, Wayne State University, USA Thidapat Tam Chantem, Virginia Polytechnic Institute and State University, USA Sanjoy Baruah, Washington University in St. Louis, USA
10:00	10:30	**Coffee Break**	

Machine-Learning-Applications (Session chair: Abderrazek Jemai)

10:30	11:00	**paper #45 Enhanced RF-based 3D UAV Outdoor Geolocation: from Trilateration to Machine Learning Approaches**	Mariem BELHOR, IMT Nord Europe, France Anne SAVARD, IMT Nord Europe, France Anthony FLEURY, IMT Nord Europe, France Patrick SONDI, IMT Nord Europe, France Valeria LOSCRI, Inria Lille - Nord Europe, France
11:00	11:30	**paper #48 An Explainable Method for Cost-Efficient Multi-View Fall Detection**	Amani Elaoud, University of Tunis El Manar, Tunisia Walid Barhoumi, National Engineering School of Carthage, Tunisia
11:30	12:00	**paper #25 Machine learning Vote based Outlier Detection in IoT Greenhouse Safe Monitoring System**	Aymen ABID, CES-Lab, ENIS, Sfax, Tunisia Omar CHEIKHROUHOU, CES-Lab, ENIS, Sfax, Tunisia Ghada ZAÏBI, METS-Lab, ENIS, Sfax, Tunisia Abdennaceur Kachouri, AFD2E-Lab, ENIS, Sfax, Tunisia
12:00	12:30	**paper #96 Integrating Random Forest Prediction for Energy Optimization in Solar-Powered Environmental Monitoring**	Ahmed Bali, École de Technologie Supérieure Montreal, Canada Pierre-Emmanuel Hladik, Nantes Université, École Centrale Nantes, France Horace Gandji, Ecole de Technologie Supérieure, Canada Abdelouahed Gherbi, Ecole de Technologie Supérieure (ETS), Montreal, Canada Mohamed Cheriet, École de Technologie Supérieure(ETS), Montreal, Canada
12:30	14:00	**Lunch break (1h30)**	

Real-Time Networking (Session chair: Mohamed Faten Zhani)

14:00	14:30	**paper #11 Exploration of Network Interface Architectures for a Real-Time Network-on-Chip**	Martin Schoeberl, Technical University of Denmark
14:30	15:00	**paper #20 Evaluation of Early Packet Drop Scheduling Policies in Criticality-Aware Wireless Sensor Networks**	Andras Pinter, University of York, UK Dr Leandro Soares Indrusiak, University of Leeds, UK Ian Gray, University of York, UK

15:00	15:30	paper #72 Multi-Criteria Optimization of Distributed Real-Time Network Topologies	Florient Champenois, Safran Electronics and Defenses, France Abraham Suissa, Safran Electronics and Defenses, France Laurent George, ESIEE Paris, France Thierry Grandpierre, ESIEE Paris, France Etienne Borde, University of Canterbury, New Zealand Florian Brandner, Télécom Paris, France
15:30	16:00	paper #85 Controllable virtual network service over a multi-administrative multi-domain network	Stanislas Pedebearn, LAAS-CNRS, UPS, Toulouse, France Slim Abdellatif, LAAS-CNRS, INSA Toulouse, France Pascal Berthou, LAAS-CNRS, France Dariusz Nogalski, Military Communication Institute - NRI, Poland Belabed Dallal, Airbus Defence and Space, France
16:00	16:30	**Coffee Break**	
		Security (Session chair: Hella Kaffel)	
16:30	16:50	#12 Security Assessment Solutions for IoT Devices	MOEZ BALTI, ISETcom, Tunisia Hicham Mrabet, University of Tunis EL MANAR, Tunisia Abderrazak Jemai, University of Carthage-, Tunisia
16:50	17:10	#22 The HiTar-23 Dataset Construction and Validation For Securing Industrial Internet of Things Environment	Tarak Dhaouadi, EPT, University of Carthage, Tunisia Hichem Mrabet, University of Tunis EL MANAR, Tunisia Abderrazek Jemai, University of Carthage, Tunisia
		DAY 4: MAY 25, 2024	
08:00	08:30	**Welcome Desk**	
		Middleware & Real-Time Modeling (Session chair: Robert G Pettit)	
08:30	09:00	paper #14 Time Granularity in Behavioural Structured Acyclic Nets	Salma Alharbi, Newcastle university, UK
09:00	09:30	paper #94 A New Covert Channel in Fixed-Priority Real-Time Multiframe Tasks	Mohammad Fakhruddin Babar, Washington State University, USA Monowar Hasan, Washington State University, USA
09:30	10:00	paper #102 Checkpointing-Aware End-to-End Data Age Analysis of Task Chains under Transient Faults	Sridhar Mallareddy, IIIT, Hyderabad, India Pavan Kumar Kondooru, IIIT, Hyderabad, India Deepak Gangadharan, IIIT, Hyderabad. India
10:00	10:30	**Coffee Break**	
10:30	11:00	paper #16 Two-Step Register Allocation for Implementing Single-Path Code	Emad Jacob Maroun, TU Wien, Austria Martin Schoeberl, Technical University of Denmark, Peter Puschner, TU Wien, Austria
11:00	11:30	paper #70 The Adapation Mechanism of Chameleon - A Comprehensive Adaptive Middleware for Mixed-Critical Cyber-Physical Networks	Melanie Feist, Goethe University Frankfurt am Main, Germany Uwe Brinkschulte, University of Frankfurt, Germany Mathias Pacher, Goethe University Frankfurt, Germany
11:30	12:30	**Pannel Discussion**	
12:30	14:00	**Lunch break (1h30)**	