# **2024 Global Information Infrastructure and Networking** Symposium (GIIS 2024)

**Dubai, United Arab Emirates** 19-21 February 2024



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## **Technical Program**

	Monday	Tuesday	Wednesday
	19/02/2024	20/02/2024	21/02/2024
08h30 - 09h00	Registration	Registration	Registration
09h00 - 09h30		Technical session 3	5G-mMTC workshop
09h30 - 10h00	Opening	(4 articles)	
10h00 - 10h30	Technical session 1		
10h30 - 11h00	(2 articles)		
11h00 - 11h30	Coffee break	Coffee break	Coffee break
11h30 - 12h00	Keynote 1	Keynote 2	5G-mMTC workshop
12h00 - 12h30			
12h30 - 13h30	Lunch	Lunch	Lunch
13h30 - 14h00	Technical session 2	Keynote 3	Technical session 5
14h00 - 14h30	(4 articles)		(3 articles)
14h30 - 15h00		Technical session 4	
15h00 - 15h30		(2 articles)	Closing / GIIS 2025
15h30 - 16h00	Coffee break	Coffee break	
16h00 - 16h30	Tutorial 1	Tutorial 2	
16h30 - 17h00			
17h00 - 17h30			
20h00 - 22h00		Banquet dinner	

Monday 19/02/2024 (10h00 - 11h00)

#### Session 1: IoT Security and DDoS Protection (2 Papers)

 Securing IIoT Against DDoS attacks: A Stochastic Approach - Aymene Selamnia, Lyes Khoukhi, Mondher Ayadi, Ahmed Abdelkader Bouaziz...1
Machine Learning for QUIC traffic flood detection - Adam Kadi, Lyes Khoukhi, Jouni Viinikka, Pierre-Edouard Fabre...6

#### Monday 19/02/2024 (13h30 - 15h30)

#### Session 2: Networking and Communications (4 Papers)

1. Leveraging RL for Efficient Collection of Perception Messages in Vehicular Networks - Chaima Zoghlami, Rahim Kacimi, Riadh Dhaou...12

2. A Novel EDGE SIEM for Industrial IoT Flows within 5G Private Networks - Kevin Yaker, Boussad Ait Salem, Baptiste Pierard, Nadjib Aitsaadi, Vivien Raynal...18

3. Fair WiFi STA-to-AP Association with DQL-MultiMDP: Investigation and Opportunities - Mohamed Bellouch, Lynda Zitoune, Iyad Lahsen-Cherif, Véronique Vèque...24

4. An open RAN Implementation of 5G network slicing - Aymeric de Javel, Patrice Nivaggioli, Philippe Martins, Jean-Louis Rougier...29

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#### Session 3: Autonomous Vehicles and Traffic Management (4 Papers)

1. Deep Learning based Intrusion Detection for IoT Networks - Lotfi Mhamdi, Qihang Jiao...35

2. Management of Interconnected Road Junctions - Hacene Fouchal, Geoffrey Wilhelm, Emilien Bourdy...41

3. Enhancing IoT Security Through Resource-Efficient Feature Engineering - Lotfi Mhamdi, Chonghao Pei...47

4. Machine Learning-Based Vector Quantization for Secret Key Generation in Physical Layer Security - Ghazal Bagheri, Ali Khandan Boroujeni, Stefan Köpsell...53

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#### Session 4: IoT Innovations and Comfort Regulation (2 Papers)

1. Personalised Environmental Regulation for IoT Based on Perceived User Comfort - Guillermo Ponce Contreras, Gustavo Guedes Barbosa, Vítor Gabriel Reis Caitité, Daniel Fernandes Macedo, Adriano Alonso Veloso...60

 Case study of WebAssembly Runtimes for AI Applications on the Edge -Saif eddine Khelifa, Miloud Bagaa, Messaoud Ahmed Ouameur, Adlen Ksentini...66 Wednesday 21/02/2024 (13h30 - 15h00)

#### Session 5: Advanced Machine Learning and IoT Security (2 Papers)

1. Improving OTP Authentication with PQC Algorithms - Luka Khorkheli, David Bourne, Vihang Chakravarty, Stalin Abraham, Gandeva Bayu Satrya, Adel Ben Mnaouer...72

2. Real Time Complex Event Processing And Stream Reasoning for Low-Cost IoT Systems - Mouhamet Latyr Ndiaye, Mamour Diop, Yacine Ghamri-Doudane, Ismail Bennis, Didier Orange, Magali Gerino...78