



ICNAS 21



LABORATOIRE RESEAUX ET SYSTEMES (LRS)



5th International Conference on Networking and Advanced Systems (ICNAS 2021)

Annaba, Algeria, 27-28 October 2021

27 October 2021

Pr. T. Bouhadada, Pr. R. Laouar	
10:00-10:30 PLENARY	
Opening ceremony Keynotes (Live stream)	
10:30 – 10 :45 Coffee Break	
PARALLEL SESSIONS	
Chairs: Pr. H.F. Merouani, Dr. S.Guessoum	
Session 1 : Artificial Intelligence and Applications	
10:45-12:30	How to have a structured database for lung cancer segmentation using deep learning technologies Selma Mammeri, Mohamed Amroune, Mohamed YassineHaouam and IssamBendib
	Deep Learning and Classical Machine Learning for code mapping in Heterogeneous Platforms YacineHakimi, Riyad Baghdadi and YacineChallal
	Convolutional Auto Encoder and Bidirectional LongShort Term Memory to Estimate Remaining UsefulLife for Condition Based Maintenance Abderrezek Samira and BourouisAbdelhabib
	A hybrid CBR classification model by integrating Decision Tree and Random Forest into case Retrieval IlhemTarchoune, AkilaDjebbar and Hayet Farida Merouani
	Improving Road Traffic Prediction By using Dependencies Study: Cross-Correlation based Approach RedouaneBenabdallahBenarmas and KaddaBeghdadBey
Chairs: Pr. M. Derdour, Dr. M. Nafa	
Session 2 : Technologies for future Internet and Internet of things (IoT)	
	Trust evaluation method for Wireless Sensor Networks based on behavioral similarity and similarity coefficient Ahmed Saidi
	Replication and Migration Heuristics ForEnhancingService Accessibility In Fog

10:45-12:30	environment KhawlaBekkouche, Said Brahimi and Mehdi Boulaiche
	Classification of Coverage Algorithms in Multimedia Wireless Sensor Networks ManelBouhali, Amira Bendjeddou and NaciraGhoualmi-Zine
	A Q-learning based Forwarding Strategy for Named Data Networking YakoubMordjana, BadisDjamaa and Mustapha RedaSenouci
12:30– 13:30- CONFERENCE LUNCH	
PARALLEL SESSIONS	
Chairs: Pr. Y. Mohamed Benali, Pr. Chaker Mezioud	
Session 3 : Big Data analytics	
13:30- 14:50	Diabetes mellitus early stage risk prediction using machine learning algorithmes. SarrahSamet, Mohamed RiddaLaouar and IssamBendib
	A Survey of Dynamic Replication Strategies in Cloud Computing Systems ImadEddineMiloudi, BelabbasYagoubi and Fatima Zohra Bellounar
	Dual Load Balancing Strategy for Virtual Network Embedding in SDN-Enabled Distributed Cloud AbderrahimBouchair, BelabbasYagoubi and Sid Ahmed Makhoul
	Use of Machine Learning Techniques to Predict Diabetes at an Early Stage SarrahSamet, Mohamed RiddaLaouar and IssamBendib
Chairs: Pr. H. Bendjenna; Dr. A. Amara Korba,	
Session 4 : Security and Privacy	
13:30- 15:10	Fuzzy logic for emergence verification Ali Boukehila
	FPGA Implementation of Mixed Robust Chaos-based Digital Color Image Watermarking RedouaneKaibou and Mohamed Salah Azzaz
	Collective DDoS Detection by an Entropy-based Method AbdenacerNafir, SmaineMazouzi and Salim Chikhi
	An Efficient Authenticated Group Key Agreement Protocol for Dynamic UAV Fleets in Untrusted Environments AnfalAyad and YoucefHammal
	ClusterChain: Decentralized and Trustworthy Clustering Over Blockchain YaminaKhenfouci, YacineChallal and Leila Hammad

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PARALLEL SESSIONS	
Chairs: Pr. H. Bahi	
Session 5 : Artificial Intelligence and Applications	
09:00-10:40	A New Steganography Technique Based on Dotted Arabic Letters Features AbdenourBoulesnane, Adel Beggag and Mustapha Zedadik
	AOM4JADE: An Aspect-Oriented Monitoring approach for JADE-based Multi-Agent Applications Mohamed SedikChebout
	Recommendation of learning resources in social learning environment using data mining Sara Gasmi, TaharBouhadada and KamilyaLaib
	A Parallel and Optimized Image Compressed Sensing Solution ZakariaBairi, KadaBeghdadBey, AbdenourAmamra and BadisDjamaa
	Systemic review of data-driven Maintenance 4.0: rotary machine experimentation NassimaAissani, IbtissemMechrouer and AssiaFilali
Chairs:Dr. Amira Bendjedou	
Session 6 : Technologies for future Internet and Internet of things (IoT)	
09:00-10:40	Single channel Nonlinearity Mitigation in PDM-16QAM Coherent Optical System NarimaneHadjadji and Hamdi Rachid
	An optimized time synchronization protocol for WSAWs NadhirBoukhechem and NadjibBadache
	Performance Evaluation of Recent Traffic-Aware Scheduling Functions for 6TiSCH Networks TaboucheAbdeldjalil, DjamaaBadis and Senouci Mustapha Reda
	A study of Lagrangian Relaxation and Dantzig-Wolfe Decompositions for the Generalized Assignment Problem GattalElhachemil and Benrazek Ala-Eddine
	An Agent Deep Reinforcement Learning based Adaptive Traffic Light Control for Isolated Intersection Tarek Amine Haddad
10:40 - 11:00 Coffee Break	
PARALLEL SESSIONS	
Chairs: Dr. A. Bey	
Session 7 : Big Data analytics	
11:00 - 12:20	A Cost-Effective Space Partitioning Approach for IOT Data Indexing and Retrieval IbtissemKemouguette, KouahlaZineddine, Benrazek Ala-Eddine, FarouBrahim and Seridi Hamid
	Detection of precancerous laryngeal leukoplakia using sub-band based cepstral ElmoundherHadjaidji, Mohamed Cherif Amara Korba and Khaled Khelil
	Trust-based Approach to Secure Low-Power and Lossy Networks Routing Protocol

	MeriemAbid, Sarah NaitBahloul and Sara Hamlili
Chairs: Dr. M. A. Ferrag	
Session 8 : Security and Privacy	
11:00 - 12:20	Formal Specification and Verification of 5G Authentication and Key Agreement Protocol using mCRL2 HossemEddineHafidi, Hmidi Zohra, KahloulLaïd and SaberBenharzallah
	On the security of business processes: classification of approaches, comparison and research directions Farah Abdmeziem, SaidaBoukhedouma and MouradChabaneOussalah
	Deep learning for cryptanalysis attack on IoMT wireless communications via smart eavesdropping ZakariaTolba and MakhloufDerdour
	Efficient Interpolation-based Reversible Watermarking for Protecting Fingerprint Images Mohamed LamineBenseddik, Khalil Zebbiche, Azzaz Mohamed Salah and Said Sadoudi
12:20 – 12 :40 CLOSING CONFERENCE	