



Conference Program

6th International Conference

On Electrical Engineering and Control Applications, ICEECA2024

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Khenchela, Algeria – November 19-21st, 2024

ICEECA'2024 Technical program

	08H30 09H00	09H00 09H30	09H30 10H30	10H30 10H50	10H50 11H50	11H50 14H00	14H00 15H00	15H00 16H15	16H15 16H30	16H30 17H45
Tuesday Nov. 19th, 2024	Registration	Opening	SP1 : Room 1 Pr. Abdennour Lounis	Break coffee	R1 :S1_CS Ids :20, 11, 30, 59,238	Lunch	SP2-Online: Room 1 Pr. Massimo Morichi	R1 :S2_CS Ids :60, 79, 102, 115,230	Break coffee	R1 :S3_CS Ids :126, 131, 144, 155,235
		09H15 10H15	10H15 10H45		R2 :S1_SC Ids :26, 31, 40, 43,231			R2 :S2_SC Ids :17,63, 146, 154,23		R2 : S3_NANO Ids :36, 152, 141, 33
					R3 :S1_RE Ids :57, 66, 105, 69			R3 :S2_RE Ids :117, 151, 118, 148,90		R3 :S3_FTC Ids :16, 24, 108, 200, 160
Wednesday Nov.20th, 2024		SP3-Online: Room 1 Pr. Tarek Ahmed-Ali	Break coffee		R1 :S4_CS Ids :156, 145, 140, 161,233	Lunch		R1 :S5_CS Ids :74, 67, 32, 109, 234,134	Break coffee	R1 :S6_CS Ids :39, 49,237, 162
		08H45 10H00	10H00 10H15		R2 :S4_SC Ids :4, 19, 22, 95, 64			R2 :S5_SC Ids :34, 42, 51, 93, 29		R2 :S6_SC Ids :35, 45, 232,119
					R3 :S4_RE Ids :103, 106, 138,236			R3 :S5_NAN Ids :08, 70, 100,92		R3 :S6_FTC Ids :120, 128, 201, 54
Thursday Nov.21st, 2024		R1 :S7_CS Ids :121, 123, 211, 127	Break coffee		R1 :S8_CS Ids :165, 78, 210, 212	Closing				
		R2 :S7_SC Ids :50, 72, 97, 164			R2 :S8_SC Ids :98, 86, 12, 13					
		R3 :S7_RE Ids :01, 15, 46, 96				Lunch				

CSE : Control and systems engineering

SC : Signal and communications

FTC : Faults Diagnosis-Faults Tolerant Control

RE : Renewable Energy

UNC : Unconventional algorithms in control engineering

SP : Plenary session

 R_{1,2,3} : Room's number

IDs : paper's identification number

**6th International Conference on Electrical Engineering
and Control Applications (ICEECA2024)**

<https://iceeca.org>

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PLENARY Sessions program

===== Regular Plenary Session 1 =====

Access link to the plenary session : starts on November 19th, 2024, at 09:30 a.m. (GMT+1), Algerian time.

Video link : meet.google.com/pbb-ihjx-ahh

Prof. Abdenour LOUNIS

University Paris Saclay, France



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Professor Abdenour Lounis, Doctor in Nuclear Physics, from CNRS-Grenoble, France and PhD in High energy Physics from University of Montreal, Canada. He is a senior researcher in Laboratoire de Physique des 2 Infinis, Irène Joliot Curie Laboratory (IJC Lab) at Orsay and Professor of Université Paris-Saclay, France. He has contributed during more than 30 years to different research projects mainly those based at CERN Geneva and FERMILAB Chicago, USA. As Pixel project leader at IJC Lab, he has launched a new research activity axis, on innovative high resolution pixel detectors and submicron electronics for ATLAS-CERN experiment. Regarding academic activity, He contributed as responsible of Master 1 Nuclear Energy to nuclear experimental physics teaching duties and internship organization and placement of worldwide students in different research centers (CNRS-CEA-Nuclear Industries, CERN). Abdenour Lounis has cumulated more than 500 publications in Nuclear Instrumentation and has directed successfully several doctorate PhD thesis of Université Paris Saclay. conferences.

Title :

**Recent advanced technologies in radiation sensors used for
nuclear experimental projects and spin-off applications**

Abstract : Semiconductors sensors are preferred in most of nuclear applications for their superiority in position and timing resolution.

Moreover important progress have been made recently to improve for their radiation tolerance, especially when they are associated with rad-hard readout Asics electronics. In this seminar, after a brief review of the status of the art of radiation sensors, technical arguments will be detailed to highlight their performance in the context of most important international scientific projects and spin-off applications

===== Online Plenary Session 2 =====

Access link to the plenary session : starts on November 19th, 2024, at 2:30 p.m. (GMT+1), Algerian time.

Video link : meet.google.com/jdr-vmxx-ngc



Prof. Massimo Morichi,
Universities of Aix-Marseille (France) and Camerino (Italy)
m.morichi@caen.it

He starts his activity with the Italian National Institute of Nuclear Physics-INFN and the Ministry of Interior for the Chernobyl emergency, while he was Teacher at the Atomic Defence Laboratory on Gamma-Spectrometry and Nuclear Emergency Measurements. He worked on the development of the first nuclear measurement business unit of COGEMA (Eurisys Measures) and participate to realize all major nuclear measurement systems installed for the French Nuclear Fuel Facilities (Marcoule, La Hague, Pierlatte etc.); he executed the integration of many Companies leaders in nuclear measurements technologies up to the acquisition of Canberra Industries Inc. in 2000 when COGEMA became AREVA. Appointed CTO-VP R&D launched and coordinating the development of many innovative nuclear measurement solutions for IAEA, DOE, DND, CEA till 2012 (Fresh and Spent Nuclear Fuel characterization, Active and passive neutron interrogation systems, photofission with Linac, International Safeguards measuring systems as well as the entire new design of Radiation Monitoring System applied to VVR, EPR and AP1000 reactors. In 2011, a week after the Fukushima accident, was appointed Group Leader of the AREVA Fukushima Project in charge of the site remediation plan in Japan in support to TEPCO in the frame of the crisis support collaboration established at government level between France and Japan. He is today also Director of the international EU MICADO Project for the realization of the most innovative and expert nuclear waste characterization and digitization system that could represent the EU reference standard.

He's actively studying on nuclear transmutation for the development of a novel ADS Nuclear System and is member of the Scientific Board and Advisor to the original CERN team that design the first Energy Amplifier ADS reactor (lead by Prof. Carlo Rubbia nobel prize). He's actively involved in the technology identification and establishing the international collaborations. He was visiting member of the Scientific Committee of IRSN (Institute for Nuclear Radiation Safety) and has been Board member of the Nuclear Experimental Reactor J. Horowitz (CEA Cadarache).

He's been teacher in 2022 of Nuclear Measurements at Master on Criminology of University of Camerino and is teaching at University of Aix-Marseille on Nuclear Dismantling & Decommissioning (measurements & methods)

Title :

**Novel Nuclear Measurements techniques for SNM
identification and analysis in the field of Fundamental
Research, Nuclear Security & Safeguards**

===== Regular Plenary Session 3 =====

Access link to the plenary session : starts on November 20th, 2024, at 9:15 a.m. (GMT+1), Algerian time.

Video link : meet.google.com/aii-swvb-ghz

Prof. Tarek Ahmed-Ali

University of Caen Normandy, France

tarek.ahmed-ali@unicaen.fr



Professor Tarek Ahmed-Ali was born in Algiers, Algeria, in 1972. He received the B.Sc. degree in electrical engineering from the Ecole Nationale Polytechnique of Algiers, Algiers, in 1994, the M.Sc. degree in electrical and computer engineering from the University of Paris VI, Paris, France, in 1995, and the Ph.D. degree in electrical and computer engineering from the University of Paris Sud, Paris, in 1998. In 1998, he joined the University of Paris XIII, Paris, as a Teaching and Research Assistant. In 1998, he was also with the Ecole Centrale de Lille, Lille, France, as a Teaching and Research Assistant. In 2000, he joined Société Nationale des Chemins de fer français

(the French National Railway Corporation) as a Research and Development Engineer. In 2002, he became a Lecturer in control engineering at Ecole Nationale des Ingénieurs des Etudes et Techniques de l'Armement, Brest, France. In 2008, he joined as an Associate Professor at the University of Caen, Caen, France, where he became a Professor of automatic control in 2010. His main research interests include sliding mode control, nonlinear observers, and fault-tolerant control and diagnosis in the field of ac drives.

Title : Adaptive observers from finite to infinite dimensional systems

Abstract : This talk is devoted to adaptive observers for some classes of distributed parameters systems. We will show that several existing results for finite dimensional systems can be extended to infinite dimensional systems. More precisely, new finite-dimensional adaptive observers are proposed for uncertain heat equation and a class of linear Kuramoto-Sivashinsky equation (KSE) with local output. The observers are based on the modal decomposition approach and use a classical persistent excitation condition to ensure practical exponential convergence of both states and parameters estimation. An important challenge of this work is that it treats the case when the function $\varphi_1(\cdot, t)$ of the unknown part in the PDE model, depends on the spatial variable and $\varphi_1(\cdot, t) \in L^2(0, 1)$.

Tuesday 19th, November 2024

Auditorium

Plenary Session 1

Chairs : Pr. Slimane Oussalah and Dr. Djemouai Djamai

09h30-10h30	Recent Advanced Technologies in Radiation Sensors used for Nuclear Experimental Projects and Spin-off Applications Pr. Abdenour LOUNIS	ICEECA2024 SP1
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Coffee break : 10h30 - 10h50

 Tuesday 19th, November 2024

Room 1

Session S1-CSE : Control and systems engineering

Chairs : Pr. Mohamed Chemachema and Pr. Soufi Youcef

10h50- 11h05	Optimized Fractional Order PID Controller design for Stand-alone PV System based on Quasi-Z-Source Inverter Hadjaidji, Fatma Zohra*; Boukhetala, Djamel ; Barbot, Jean-Pierre	ICEECA2024 CS_20
11h05- 11h20	Sliding Mode with Optimal Control Strategies for an Unmanned Aerial Vehicles using High-Granularity Observers Study of Robust Generalized PQ Theory Based On Artificial Neural Network for Unbalanced System MEBAREK, Abdessalem ryad*; LEILA, MERABET ; CHOUAIB, RAHLI ; SAAD, Salah	ICEECA2024 CS_11
11h20- 11h35	A Thermal Feedback System for Flow Rate Ventilator Monitoring Based IoT Difallah, Sabrina*	ICEECA2024 CS_59
11h35- 11h50	A Neuro- Fuzzy Risk-Based Approach to Failure Mode and Effects Analysis in Electric Vehicles Chakhrat, ammar*; GUEDRI, Abdelmoumene	ICEECA2024 CS_30
11h50- 12h05	Sliding Mode with Optimal Control Strategies for an Unmanned Aerial Vehicles using High-Granularity Observers Study of Robust Generalized PQ Theory Based On Artificial Neural Network for Unbalanced System Zineddine Boukouira, Fethi Demim, Ayoub Daadi, Abdelkrim Nemra, Elhaouari Kobzilic, Mohammed Rahmouni, Sid Ahmed Menad, Hadjira Belaïdi, Abdenebi Rouigue	ICEECA2024 CS_238

Tuesday 19th, November 2024
Room 2
Session S1-SC: Signal and communications
Chairs: Pr. Malika Kandouci and Pr. Soltani Faouzi

10h50- 11h05	PSO-Based Optimization Techniques for 6G FSO Communication Systems ALLAOUA, Oumaima*; Djellab, Hanane; Belhocine, Yacine; Mammri, Fouzia; riad, SAIDI; Boumehrez, Farouk	ICEECA2024 SC_26
11h05- 11h20	Arabic Text Detection in Videos Based on Mathematical Morphology and SVM Classifier Meziani, Fariza*	ICEECA2024 SC_31
11h20- 11h35	Deep-feature dissimilarities-based learning for wheat leaf disease severity estimation LAKEHAL, Mohamed Rayane*; BOUIBED, Mohamed Lamine; NEMMOUR, Hassiba; CHIBANI, Youcef	ICEECA2024 SC_40
11h35- 11h50	Optimizing 6G Networks: Impact of Massive MIMO on Throughput in 6G Communications Latrache, Sofiane*; Hocine, BELLAHSENE ; Taleb-Ahmed, Abdelmalik	ICEECA2024 SC_43
11h50- 12h05	Blockchain for Security and Privacy in IoT ApplicationAreas: A Systematic Literature Review Ilyas Benkhaddra, Fethi Demim, Abdelkrim Nemra	ICEECA2024 SC_231

Tuesday 19th, November 2024
Room 3
Session S1-RE: Renewable Energy
Chairs : Pr. Moussi Ammar and Dr. Bounemeur Abdelhamid

10h50- 11h05	Electric Vehicle's Traction Chain: Recent Advances and perspectives HAMIL, Ali*	ICEECA2024 RE_57
11h05- 11h20	Study of MPPT algorithm for PV systems under Partial Shading Conditions using Horse Herd Optimization izgheche, yousra*; Tahar, Bahi; lakhdara, amira	ICEECA2024 RE_66
11h20- 11h35	Enhancing Stand-Alone Solar Systems with Embedded Systems: Integration of Buck and Boost Converters Abdelkader, SAIDI*	ICEECA2024 RE_105
11h35- 11h50	Investigation and modulation strategies for a three-phase split-source inverter fed a PV hamdi, romaisa*	ICEECA2024 RE_69

Lunch : 11h50 - 14h00

Tuesday 19th, November 2024

Room 1

Plenary Session 1 :

Chairs : Pr. Abdenour Lounis and Pr. Slimane Oussalah

14h00-15h00	Novel Nuclear Measurements techniques for SNM identification and analysis in the field of Fundamental Research, Nuclear Security & Safeguards Pr. Massimo Morichi	ICEECA2024 SP2-Online
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 Tuesday 19th, November 2024

ROOM 1

Session S2-CS: Control and systems

Chairs : Pr. Charef Abdelfatah and Dr. Lehouche Hocine

15h00- 15h15	Derivative-Free Adaptive Control of Tow-Link Flexible Planar Robots Using Neural Networks <i>Sahli, Abdelnaceur*; Ahmed, BELKHIRI; Rahmani, Belkacem; Belkhiri, Mohammed; MAKHLOUFI, Hibat Erahmane</i>	ICEECA2024 CS_60
15h15- 15h30	Artificial Intelligent-based Parameter Tuning of Active Disturbance Rejection Controller for Electrode Wire Feed System <i>HADDAD, Mohammed*; HAMOUDA, Noureddine; BABES, Badreddine; Lekouaghet, Badis</i>	ICEECA2024 CS_79
15h30- 15h45	Enhancing Renewable Energy Systems with PD(1+PI) and Predictive Direct Power Control Techniques <i>Boutabba, Tarek*; BENLAOUI, Idriss; Menzri, Fatima; anfel, Iekmine; belbedj, Ioubna; Mohamed Metwally, Mahmoud</i>	ICEECA2024 CS_102
15h45- 16h00	Performance Analysis of a Matrix Converter under unbalanced Load <i>Boukadoum, Aziz*; Bouguerne, Abla; Bahi, Tahar; Iaatra, Yousfi; Mesbahi, Nadhir</i>	ICEECA2024 CS_115
16h00- 16h15	Detection And Tracking of Mobile Objects using Hybrid Algorithms <i>Aimen Abdelhak Messaoui, Rabah Louali, Fethi Demim, Abdelkrim Nemra, Ismail Belkaid, Yasser Zeggar and Irki Zohir</i>	ICEECA2024 CS_230

Tuesday 19th, November 2024

Room 2

Session S2-SC : Signal and communications

Chairs : Pr. Barkat Warda and Pr. Marir Farid

15h00- 15h15	<i>Tri-band aperture-coupled dielectric resonator antenna using (RE-BaTiO₃) composite materials</i> CHELGHOUUM, Rachid*; CHELGHOUUM, Rachid	ICEECA2024 SC_17
15h15- 15h30	<i>Comparative study of clustering methods within a cognitive radio network</i> Okba, NESRAOUI*; DJAMAL, TEGUIG; SADOUDI, Said	ICEECA2024 SC_63
15h30- 15h45	<i>Comparative Analysis of QUIC, Unreliable QUIC, and MPQUIC for Video Streaming in VANETs</i> BOUMEHREZ, Farouk*; Elhachi, Hana; Labioye, mohamed; sahour, abdelhakim; Redada, Salah	ICEECA2024 SC_146
15h45- 16h00	<i>Secure UAV Communication : An Energy Consumption Perspective</i> Merazka, Fatiha*; Ouadah, Meriem	ICEECA2024 SC_154
16h00- 16h15		ICEECA2024 SC_154

 Tuesday 19th, November 2024

Room 3

Session S2-RE : Renewable Energy

Chairs : Pr. Haddad Salim and Pr. Shashoa, Nasar Aldian

15h00- 15h15	<i>ANFIS-Based Modeling of the NEXA™ 1.2 kW Fuel Cell Module for Enhanced PEMFC Emulation</i> HADJAISSE, Aboubakeur*; GAHGOUHI, Soufiane; Rabhi, Abdelhamid; Benmiloud, Mohammed; GAHGOUHI, Othmane; AMEUR, Khaled; Mecheri, KIOUS; CHOHR, Abdelkarim	ICEECA2024 RE_117
15h15- 15h30	<i>Design and Experimental Validation of a Wind Turbine Emulator with Optimal Torque Control Using a PMSG for Standalone Energy Systems</i> Benhacine, Tarek*	ICEECA2024 RE_151
15h30- 15h45	<i>Strategic Enhancements in CZTS Solar Cells: The Role of BSF Layers in Photovoltaic Efficiency Optimization</i> ZEGHDAR, Kamal*; Mansouri, Sihem ; Dehimi, Lakhdar	ICEECA2024 RE_118
15h45- 16h00	<i>Neural Network-Powered Direct Power Control for Enhancing DFIG Wind Turbine Performances</i> Sayeh Karim Fathi*; TAMALOUZT Salah; Ziane Djamel	ICEECA2024 RE_148
16h00- 16h15	<i>Optimizing Grid-Connected Hybrid Renewable Energy Systems Using Innovative Integrated Controllers</i> Tarek Boutabba , Fatima Menzri, Idriss Benlaloui, Anf Elkmine, Loubna Belbedj1, Mohamed Metwally Mahmoud	ICEECA2024 RE_90

Coffee break : 16h15 - 16h30

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Tuesday 19th, November 2024

Room 1

Session S3-CS : Control and systems

Chairs : Pr. Boucherit Med seghir and Dr. Salim ZIANI

16h30- 16h45	Robust Nonlinear Disturbance Mitigation in Permanent Magnet Synchronous Motor: A Hybrid Backstepping and High Order Sliding Mode Control Strategy OUTEMZABET, Lydia*; Ziani, Dr Salim ; Ahmed-Ali, Tarek; Djouadi, Hafidh	ICEECA2024 CS_126
16h45- 17h00	Composite Defect Detection Using Thermography Active: A Comparative Study of YOLOv8 and YOLOv10 Zaghoudi, rachid*; Bouguettaya, Abdelmalek; gherfi, kaddour	ICEECA2024 CS_131
17h00- 17h15	A New Bird Database for Object Detection using YOLOv5 Model Benzaid, Karima*; BOULEMNADJEL, Amel; Chelghoum, Rayene	ICEECA2024 CS_144
17h15- 17h30	The Effectiveness Comparison between Multi-Stage RLS Algorithm for (CARMA) and the Multi-Stage RLS Algorithm for (CARAR) Systems Shashoa, Nasar Aldian*	ICEECA2024 CS_155
17h30- 17h45	Enhanced Trajectory Planning and Autonomous Guidance for Unmanned Aerial Vehicle Yasmine Saidi, Fethi Demim and Abdelkrim Nemra	ICEECA2024 CS_235

 Tuesday 19th, November 2024

Room 2

Session S3-NANO : Micro-and Nanotechnologies

Chairs : Pr. Slimane Oussalah and Dr. Djemouai Djamai

16h30- 16h45	Characterization of Mixture Phase of TiO2 Nanoparticles Doped with Different Concentration of Fe: Structural and Optical properties HATEM, Djedjiga*	ICEECA2024 NANO_36
16h45- 17h00	Optical properties of 1D and 2D periodic structures based on metamaterials and dielectrics RAS LAIN, MOHAMED*	ICEECA2024 NANO_152
17h00- 17h15	Analysis of a 2D PhC Biosensor based on Cavity coupled to Waveguides for Detecting Blood Components Boulesbaa, Mohammed*; Rima, Hadjadj; Boudi, Noura; terea hadda, nour elhouda; Otmani, Hamza; mekimah, boualem	ICEECA2024 NANO_141
17h15- 17h30	Effect of Cu Doping on TiO2 Nanostructure Thin Films synthesis by Sol-Gel method Fouzia, Abbas*	ICEECA2024 NANO-33

Tuesday 19th, November 2024

Room 3

Session S3-FTC : Faults Diagnosis-Faults Tolerant Control
Chairs : Pr. Said Touati and Pr. Tarik Hacib

16h30- 16h45	<i>Random Forest Multiclass Classification Fault Detection and Diagnosis for Quadcopter UAVs</i> Adaika, Zineb Amar*; Jaber, Alaa Abdulhady; Boumehraz, Mohamed	ICEECA2024 FTC_16
16h45- 17h00	<i>Fault Prediction in The Photovoltaic System Through Machine Learning Approaches</i> Slimani, Hassina*; rafik, Mahdaoui; yassine, beddai	ICEECA2024 FTC_24
17h00- 17h15	<i>Improving Power Quality with a Diagnosis and Fault Tolerant Four-Leg Shunt Active Power Filter</i> Djerboub, Ahmed*; amina, TAMER Amita; Allaoui, Tayeb	ICEECA2024 FTC_108
17h15- 17h30	<i>Event-Triggered Fault-Tolerant Control for Wind Energy Systems</i> Abdelmalek Zahaf, Abdelhamid Bounemeur, Sofiane Bououden, and Ilyes Boulaibet	ICEECA2024 FTC_200
17h30- 17h45	<i>Comprehensive Modeling and Fault Analysis of Permanent Magnet Synchronous Generators: A Finite Element Approach for Inter-Turn Short Circuit</i> CHEDJARA, Sofiane*; Mostefa , Becheikh; Said, HASSAINA; TAHRI, Ahmed	ICEECA2024 FTC-160

 Wednesday 20th, November 2024

Room 1

Plenary Session 1
Chairs : Pr. Boucherit Med seghir and Pr. Charef Abdelfateh

09h15-10h15	Adaptive observers from finite to infinite dimensional systems Pr. Tarek Ahmed-Ali	ICEECA2024 SP3-Online
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Coffee break : 10h15 - 10h45

Wednesday 20th, November 2024

ROOM 1

Session S4-CS : Control and systems

Chairs : Pr. Said Hassaine and Pr. Tarek Hacib

10h45- 11h00	MPC with Disturbance Observer for quadrotor system control MAKHLOUFI, Hibat Erahmane *; Sahli, Abdelnaceur; Belkhiri, Mohammed	ICEECA2024 CS_156
11h00- 11h15	Fabric Defects Detection using Iterative Least Squares Method Biad, Souad*	ICEECA2024 CS_145
11h15- 11h30	Static Output Feedback Based Consensus Control Of T-S Fuzzy Multi-Agent Under Parametric Uncertainties Using Fuzzy Lyapunov Function Aïoub, Cherigui*; Chadli, M. ; Nachidi-Labourel, Meriem	ICEECA2024 CS_140
11h30- 11h45	Deep Learning-based Smart Parking Solution Benzaid, Karima*; Hameurlaine, Amina ; Chelghoum, Rayene	ICEECA2024 CS_161
11h45- 12h00	Adaptive Control of Mobile Robots using Neuro-Fuzzy based Reinforcement Learning Systems with Nonlinear Wheel-Slip Dynamics and Uncertainty Estimation Yasmine Saidi, Fethi Demim, Abdelkrim Nemra, Ali Zakaria Messaoui, and Momamed Tadjine	ICEECA2024 CS_233

 Wednesday 20th, November 2024

Room 2

Session S4-SC : Signal and communications

Chairs : Pr. Soltani Fouazi and Dr. Maamri Fouzia

10h45- 11h00	The BER performance for adaptive combining FSO/RF system under different modulation schemes Merrouche, Asma*	ICEECA2024 SC_4
11h00- 11h15	Robust Biometric Systems: A Secure Framework Leveraging Extreme Learning Machine Belhocine, Yacine*; Meraoumia, Abdalla; bendjenna, hakim; Saigaa, Mohammed	ICEECA2024 SC_19
11h15- 11h30	Emotion Recognition from Speech Signal Based on Gender Influence Using Prosodic and MFCC Features Houari, Horkous*	ICEECA2024 SC_22
11h30- 11h45	Energy-Efficient Power Allocation in 5G NOMA Systems Using One-to-One Based Optimization: Adaptive Solutions for Dynamic Traffic Scenarios MESSAI, Yacine*; MAAMRI, Fouzia; djellab, Hanane; SAHOUR, Abdelhakim; Boumehrez, Farouk; Bitat, Hiba Ines	ICEECA2024 SC_95
11h45- 12h00	Retinal Edge Detection in Stargardt Macular Dystrophy Disease Optical Coherence Tomography Images using a Modified Canny Detector boulaibet, samir M*; Hacini, Meriem; FELLA, HACHOUF	ICEECA2024 SC_64

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Wednesday 20th, November 2024

Room 3

Session S4-RE : Renewable Energy

Chairs : Pr. Moussi Ammar and Beddaiif Yassine

10h45- 11h00	Whale Optimization Algorithm for Optimal Sizing and Planning of Distributed Generators in Radial Distribution Networks with Short Circuit Analysis Bouchikhi, Nasreddine; fethi, boussadia; Bouddou, Riyadh*; A. belabbes; C. GOUDER	ICEECA2024 RE_103
11h00- 11h15	Hybrid control strategy for PV system based on ANN- integral backstepping MPPT algorithm Meraouah, Mustapha*; Kaddari, Faiza; Said, HASSAINE; YOUSSEF, MIHOUB	ICEECA2024 RE_106
11h15- 11h30	Enhancing Power Quality of a Solar Plant integrated into Low Voltage Distribution Network in the Existence of Non-linear Load Through SAPF with LPF OUAI, Atallah*; KOTEN, HASAN	ICEECA2024 RE_138
11h30- 11h45	Advanced Backstepping Control Strategies for Improved Mobile Robot Navigation Fethi Demim, A. A. Messaoui, A. Z. Messaoui, A. Benghezal, A. Rouigueb, A. Nemra and H. Belaïdi	ICEECA2024 RE_236

Lunch 11h45 - 14h00

 Wednesday 20th, November 2024

Room 1

Session S5-CS : Control and systems

Chairs : Pr. Kheireddine Lamamra and Dr. Zeroual Abdelhafid

15h00- 15h15	Nonlinear evapotranspiration modeling for optimized water management system Difallah, Wafa*; Bounaama, Fateh; Draoui, Belkacem; BENAHMED, Khelifa; Laaboudi, A	ICEECA2024 CS_74
15h15- 15h30	Enhancing PMSM Performance with a Three-Level NPC Inverter through DTC-SVM Technique and Sliding Mode Speed Controller Guezi, Abderrahmane*; Bendaikha, Abdelmalik; Dendouga, Abdelhakim	ICEECA2024 CS_67
15h30- 15h45	Deep Learning-based Defect Detection and Identification from Thermography Data Mentouri, Zoheir*; Bouguettaya, Abdelmalek	ICEECA2024 CS_32
16h45- 16h00	Adaptive Neural Network Nonlinear Observer of Mechanical Speed and Load Torque Estimation with A Nonlinear for Induction Machine BOUFADENE, MOURAD BOUFADENE*	ICEECA2024 CS_109
16h00- 16h15	Multi-sensor data fusion based on SVSF for mobile robot localization Hachemi Linda, Yasmine Saidi, Fethi Demim, Abedikrim Nemra and Mohamed Guiatni	ICEECA2024 CS_234
16h15- 16h30	Developing a Time-Varying Fuzzy Sets Approach with PSO Midpoint of Triangular Universe of Discourse Abdennouri zineb; Ziani salim; Ouassila Bourebia	ICEECA2024 CS_134

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Wednesday 20th, November 2024

Room 2

Session S5-SC : Signal and Communications

Chairs : Pr. Barkat Warda and Pr. Kandouci Malika

15h00- 15h15	Comparative Study of Contrast Enhancement techniques for Microscopic E. colis Images Aoumar, Hafsa*; FELLA, HACHOUF; hacini, meriem; abdelfateh, Kerrouche	ICEECA2024 SC_34
15h15- 15h30	A Matrix Pencil Method for the Efficient Computation of Direction of Arrival Estimation without Failure Using a Verti-Circular Array Aouina, karima*	ICEECA2024 SC_42
15h30- 15h45	Multi-Verse Optimization for Advanced 5G Massive MIMO Networks Bitat, Hiba Ines*; Maamri, Fouzia ; Khelfaoui, Fatima ; Belhocine, Yacine ; MESSAI, Yacine ; Feriel, Aouissi	ICEECA2024 SC_51
16h45- 16h00	Performance Assessment of Various Power Allocation Techniques for MIMO-NOMA Systems Soulef, AYAD*; Djouablia Linda	ICEECA2024 SC_93
16h00- 16h15	Intelligent Olfactory Analysis for Place Recognition using an Electronic Nose Elhaouari Kobzili, Fethi Demim, Ahmed Allam, Abdelkrim Nemra, Cherif Larbes, Yasmine Saidi, Hadjira Belaidi	ICEECA2024 SC-232
16h00- 16h15	Efficient Variable μ_law Proportionate Algorithms for Acoustic Echo Cancellation and System Identification ALILOUCHE, Ali*; BENDOUMIA, Redha ; Guessoum, Abderrezak ; Hassani, Islam	ICEECA2024 SC-29

 Wednesday 20th, November 2024

Room 3

Session S5-NANO : Micro-and Nanotechnologies

Chairs : Pr. Abdenour Lounis and Pr. Slimane Oussalah

15h00- 15h15	Effect of Iron Particles on the Breakdown Voltage of Transformer Oil Under a DC Electric Field: Study by COMSOL Multiphysics Software BOUKOUNACHA, Ahmed Yassine*; Zegnini, Boubakeur; Yousfi, Belkacem; Seghier, Tahar	ICEECA2024 NANO_8
15h15- 15h30	Temperature Dependent Dynamics of Surface Charge Accumulation in Polypropylene Films Badreddine Settaf, Zehira Ziari and Salah Sahl	ICEECA2024 NANO_92
15h30- 15h45	The growth of doped $6\text{-Ga}_2\text{O}_3$ thin films on quartz and Al_2O_3 substrates by using sol gel method Amraoui, Fatma*; Sengouga, Nouredine; messeddek, lobna	ICEECA2024 NANO_70
15h45- 16h00	The effect of annealing temperature on the structural, morphological and optical properties of copper oxide thin films Ouamane, Imane*	ICEECA2024 NANO_100

Coffee break : 16h15-16h30

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Wednesday 20th, November 2024

Room 1

Session S6-CS : Control and systems

Chairs : Pr. Abdelfetah Charef and Pr. Youcef Soufi

16h30- 16h45	Contribution of the Magnetic Fields Carried inside of the High-Voltage Three Phase Overhead Transmission Line Houicher, Salah-Eddine*; rabah, djekidel; Sid Ahmed, bessedik	ICEECA2024 CS_39
16h45- 17h00	Comparison of the effect of integrating DGs and tie switches to improve the resilience of electrical systems ABDALLAH, Imadeddine I*; Boudour, Mohamed; Iadjici, amine	ICEECA2024 CS_49
17h00- 17h15	Optimal Trajectory Planning and Robust Control for Enhanced Unmanned Ground Vehicle Performance Fethi Demim, Aimen Abdelhak Messaoui, Ali Zakaria Messaoui, Yasmine Saidi, Hadjira Belaïdi and Abdelkrim Nemra	ICEECA2024 CS_237
17h15- 17h30	Control of Air Supply System in PEMFC for Electric Vehicles SALIM, DJAHFA S*	ICEECA2024 CS_162

 Wednesday 20th, November 2024

Room 2

Session S6-SC : Signal and communications

Chairs : Pr. Marir Farid and Dr. Farouk Boumehrez

16h30- 16h45	Tunable DRA with parasitic elements for ISM band ap-plications Guernine, Rania*; KENANE, Elhadi; Sahed, Mohamed; SILA, Amal; seghouri, rima	ICEECA2024 SC_35
16h45- 17h00	Automatic Speech Transcription for Author and Speaker Attribution Using Deep Learning Techniques Bourib, Samira*; Aichouba, Yasmine ; Aguini, Nihad ; malaoui, Amel	ICEECA2024 SC_45
17h00- 17h15	Intelligent Olfactory Analysis for Place Recognition using an Electronic Nose Elhaouari Kobzili, Fethi Demim, Ahmed Allam, Abdelkrim Nemra, Cherif Larbes, Yasmine Saidi, Hadjira Belaïdi	ICEECA2024 SC-232
17h15- 17h30	Circularly-Polarized Near-Square Microstrip Antenna Bouderbala, Sonya*; BERBAR, Tarik B	ICEECA2024 SC_23
17h30- 17h45	Automated Satellite Image Registration Using Feature Points Based Approach Fatiha Meskine and Oussama Mezouar	ICEECA2024 SC_119

Wednesday 20th, November 2024

Room 3

Session S6-FTC : Faults Diagnosis-Faults Tolerant Control
Chairs : Pr. Touati Said and Pr. Chemachema Mohamed

16h30- 16h45	<i>Analysis of Fault Tolerant Controlled Doubly Fed Induction Generators</i> Diboune, Yaakoub*; Hachefaf, Redouane ; Kouchih, Djilali	ICEECA2024 FTC_120
16h45- 17h00	<i>Comprehensive Modeling and Fault Analysis of Permanent Magnet Synchronous Generators: A Finite Element Approach for Inter-Turn Short Circuit</i> CHEDJARA, Sofiane*; Said, HASSAINE; TAHRI, Ahmed; Mostefa, Becheikh	ICEECA2024 FTC_128
17h00- 17h15	<i>Genetic Algorithm optimisation and fuzzy logic for diagnostic and fault detection of rotor broken bar in induction motor</i> Mostefa, Bouras* ; Sofiane, Bououden ; Ilyes, Boulkaibet	ICEECA2024 FTC_201
17h15- 17h30	<i>Traffic Flow Modeling Using Time Series Models Based Upon IV Estimator Technique</i> BOUGHOUAS, Maroua*; Djabri, Riadh; Djari, Abdelhamid	ICEECA2024 LSS_54

 Thursday 21st, November 2024

Room 1

Session S7-CS : Control and systems
Chairs : Pr. Said Hassaine and Dr. Nabil Ben Hadda

08h45- 09h00	<i>Finite-time command filtering-based adaptive backstepping control of high-order uncertain nonlinear strict-feedback systems with output constraint</i> Soukkou, Yassine*; Khebbache , Hicham	ICEECA2024 CS_121
09h00- 09h15	<i>Optimization of ANFIS-TS Models Parameters of a Two-Shaft Gas Turbin: A Comparative Study</i> Chebbah, Abdelouahab*; Hafaifa, Ahmed; Bachene, Mourad	ICEECA2024 CS_123
09h15- 09h30	<i>Bi-level convex optimization of eco-driving for hybrid fuel cell electric vehicles</i> Akram Nedjaoui, Sofiane Bououden, Mohammed Chadli, Ilyes Boulkaibet, Bilel Neji	ICEECA2024 CS_211
09h30- 09h45	<i>Optimal Power Management Control Based on Artificial Intelligence Strategies for On-board Energy Storage Systems in DC Railway System</i> Berroum, Fawzia*; BENIDIR, Mohamed; BOUZERIA, Hamza	ICEECA2024 CS_127

Thursday 21st, November 2024
Room 2
Session S7-SC : Signal and communications
Chairs : Pr. Barkat Warda and Dr. Farouk Boumehrez

08h45- 09h00	<i>Enhancing GNSS Receiver Acquisition with SO-CFAR and GO-CFAR Processors</i> Elbahdja, Ourfella*; sabra, benkrinah; Naceur, AOUNALLAH	ICEECA2024 SC_50
09h00- 09h15	<i>Efficient OMP variant for large scale MIMO hybrid precoding system</i> Naceur, AOUNALLAH*; LABED, Smail	ICEECA2024 SC_72
09h15- 09h30	<i>Speed Estimation from Audio using Vision Transformers</i> ABDELAZIZ, Salim*; Ziani, Salim	ICEECA2024 SC_97
09h30- 09h45	<i>Advanced monitoring and control of multiple greenhouses based on LoRa-IoT</i> BOUMEHREZ, Farouk*; Feriel, Aouissi; sahour, abdelhakim; maamri, fouzia; Djellab, Hanane; Bitat, Hiba Ines; abdelali, bekhouche	ICEECA2024 SC_164

Thursday 21st, November 2024
Room 3
Session S7-RE : Renewable Energy
Chairs : Pr. Haddad Salim and Dr. Beddiaf Yassine

08h45- 09h00	<i>Modeling and Control of a 100 kW Mini Photovoltaic Power Plant Connected to the Network</i> Boukarana, Leila*	ICEECA2024 RE_01
09h00- 09h15	<i>Dimensioning of a photovoltaic installation to power a cold room with electrical energy</i> Soualmi, Hamou*	ICEECA2024 RE_15
09h15- 09h30	<i>Improved MPPT Combining Perturb & Observe Algorithm and Sliding Mode Control Technique in PV-Based Pumping System</i> Salhi, Badreddine*; Rezzak, Daoud; Boudjerda, Nasserdine	ICEECA2024 RE_46
09h30- 09h45	<i>Direct Control Cuckoo Search Optimizer with Magic Square Array Reconfiguration in PV System under Partial Shading Conditions</i> Ilyas, MIMOUN*; YOUSSEF, MIHOUB; Aicha, ASRI; Said, HASSAINE	ICEECA2024 RE_96

Coffee break : 10h00 - 10h15

Thursday 21st, November 2024

Room 1

Session S8-CS : Control and systems
Chairs : Dr. Lehouche Hocine and Dr. Zeroual Abdelhafid

10h15- 10h30	Deep Learning Prediction of Wildfire probability Occurrence Using Meteorological Factors from Khencela Province Forests Mohamed, Lamri*; sahour, abdelhakim; Boumehrez, Farouk; abdelaali, bekhouche	ICEECA2024 CS_165
10h30- 10h45	Effects of discharge electrical parameters on a plasma jet characteristics Sahli, Heithem*; BENTERROUCHE, Lyes; Kihel, Mouloud; Namous, Wail Seifeddine; Bousba, Houssem Eddine	ICEECA2024 CS_78
10h45- 11h00	Autonomous vehicle control Using a Fuzzy System with LQR-Linear Matrix Inequality Approach Hicham, Kara* ; Sofiane, Bououden ; Ilyes, Boulkaibet ; Bilel Neji	ICEECA2024 CS_210
11h00- 11h15	Design and implementation of a virtual display keyboard based on a fuzzy system Ziani, Salim ; Abdelazizi, Salim	ICEECA2024 CS_212

 Thursday 21st, November 2024

Room 2

Session S8-SC : Signal and communications
Chairs : Dr. Sahour Abdelhakim and Dr. Maamri Fouzia

10h15- 10h30	Performance Evaluation of OTFS-UAV Communication for Mobile Users Merazka, Fatiha* ; Khraimech, Ghania	ICEECA2024 SC_98
10h30- 10h45	Robust Face Recognition under Noise and Advanced Denoising Techniques Alane, Badreddine*; leila, hellal; Mosbah, Djaber	ICEECA2024 SC_86
10h45- 11h00	Efficient Approach for 3D Segmentation of Brain Tumor based on MRI Slices Using ITK and VTK Toolkits BAALI, Mehdi*; Bourbia, Nadjla ; kamel, messaoudi ; Bourennane, El Bey	ICEECA2024 SC_12
11h00- 11h15	Enhancing Pharmaceutical Accuracy: Application of Roboflow in Drug Identification (Case of Glucophage 850mg) Boukhenoun, Rania*; Hakim, DOGHMANE ; kamel, messaoudi ; Bourennane, El Bey	ICEECA2024 SC_13

Closing and Lunch 12h00