



Conference Program

- Final version -

July 07-08, 2023, Fez, Morocco

Welcome to the International Conference on Circuit, Systems and Communication (ICCSC)!

We are thrilled to have you join us for this exciting gathering of brilliant minds in the circuit, systems, and communications field. The ICCSC is a prestigious event that brings together researchers, academicians, industry professionals, and students from around the world to share knowledge, exchange ideas, and explore the latest advancements in this rapidly evolving domain.

This conference serves as a platform for fostering collaboration and encouraging interdisciplinary discussions on a wide range of topics, including but not limited to artificial intelligence, data science, networking, cybersecurity, machine learning, and information theory. With a diverse program featuring keynote speeches, technical sessions, workshops, and poster presentations, ICCSC promises to offer a stimulating and enriching experience for all participants.

We have assembled a distinguished lineup of experts and thought leaders who will share their insights, cutting-edge research, and innovative solutions. This is an excellent opportunity to expand your professional network, engage in thought-provoking discussions, and stay updated with the latest trends shaping the future of computer science and communications.

Whether you are a seasoned professional, a budding researcher, or a passionate student, ICCSC offers a supportive and inclusive environment that encourages collaboration, fosters intellectual growth, and promotes excellence. Take advantage of the numerous networking opportunities, engage in fruitful conversations, and establish connections that may lead to new collaborations and future breakthroughs.

On behalf of the organizing committee, we extend our warmest welcome to all attendees, sponsors, and partners. We are confident that ICCSC will be a memorable and rewarding experience for everyone involved. Let us come together, embrace innovation, and shape the future of computer science and communications.

Welcome to ICCSC 2023, and we look forward to a successful and inspiring conference!



Prof. Mohammed EL GHZAOUI
Chairman of ICCSC2023

Committees

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- * **Sicard Etienne**, INSA, Toulouse, France

Friday, 07 July 2023 (GMT+1)

8h30-9h00

Welcoming Participants

9h00-9h30

Official Opening of the Conference

Moderator: Sayantika Roy (IMPS College of Engineering and Technology, India)

Prof. Mohammed BENLEMLIH

Dean of Faculty of Sciences Dhar EL Mahraz,
USMBA, Fez, Morocco

Prof. Mohammed EL GHZAOUI

ICCSC'23 Chair
FSDM, USMBA, Fez, Morocco

Meet Link

[Link to the Session](https://meet.google.com/pnn-nioh-qmx) (<https://meet.google.com/pnn-nioh-qmx>)

Plenary Session 1: **Sudipta DAS** (IMPS College of Engineering and Technology, India)

9h30-10h15

❖ Speaker Lecture : **PROF. NAYYAR ANAND** (Duy Tan University, Da Nang, Vietnam)

**“6G WIRELESS COMMUNICATION :
ARCHITECTURES, USE CASES AND RESEARCH AREAS”**

10h15-12h30

Oral Session 1

Artificial Intelligence and its Application

Oral Session 2

Electronics and Signal Processing

Oral Session 3

Renewable Energy

Meet Link

[Link to the Session](https://meet.google.com/pnn-nioh-qmx) (<https://meet.google.com/pnn-nioh-qmx>)

Plenary Session 2: **YOUNESS ECHCHADI** (FS UIT, Kenitra, Morocco)

15h00-15h30

❖ Speaker Lecture : **PROF. PHILIP W. T. PONG** (New Jersey Institute of Technology,
Newark, NJ 07102, United States)

**“CONTACTLESS MAGNETIC SENSING IN CONDITION MONITORING AND
ANOMALY DETECTION FOR SMART GRID: NEW POSSIBILITIES AND
ALTERNATIVES”**

15h30-16h45

Oral Session 4

Antennas and Communication Systems

Oral Session 5

Materials Sciences and Applications

Oral Session 6

Wireless and wired Communication Systems

Saturday, 08 July 2023 (GMT+1)

Meet Link

[Link to the Session](#)

(<https://meet.google.com/pnn-nioh-qmx>)

Plenary Session 3: **GHAIDA MUTTASHAR ABDULSAHIB** (University of Technology, Baghdad, Iraq)
OSAMAH IBRAHIM (Khalaf, Al-Nahrain University, Iraq)

9h00-09h30

- ❖ Speaker Invited: **PROF. DR. FAISAL SHAFIT** (National University of Sciences and Technology, Pakistani)

“DEEP LEARNING ON CHIP”

9h30-10h00

- ❖ Speaker 3: **PROF. MÉROUANE DEBBAH**, (Technology Innovation Institute (TII), Abu Dhabi, UAE)

**“LARGE LANGUAGE MODELS FOR WIRELESS:
THE NEXT BIG THING?”**

	Oral Session 9	Optics, Circuits and Systems
10h00-12h00	Oral Session 10	Applications of Machine Learning
	Oral Session 11	Fuzzy Systems and Artificial Intelligence



Prof. Dr. Anand Nayyar

Professor, Scientist, Vice-Chairman (Research), Director (IoT and Intelligent Systems Lab) in School of Computer Science, Duy Tan University, Da Nang, Viet Nam.

TITLE: 6G Wireless Communication: Architectures, Use Cases and Research Areas

Short Bio: Dr. Anand Nayyar received Ph.D (Computer Science) from Desh Bhagat University in 2017 in the area of Wireless Sensor Networks, Swarm Intelligence and Network

Simulation. He is currently working in School of Computer Science-Duy Tan University, Da Nang, Vietnam as Professor, Scientist, Vice-Chairman (Research) and Director- IoT and Intelligent Systems Lab. A Certified Professional with 100+ Professional certifications from CISCO, Microsoft, Amazon, EC-Council, Oracle, Google, Beingcert, EXIN, GAQM, Cyberoam and many more. Published more than 160+ Research Papers in various High-Quality ISI-SCI/SCIE/SSCI Impact Factor- Q1, Q2, Q3 Journals cum Scopus/ESCI indexed Journals, 70+ Papers in International Conferences indexed with Springer, IEEE and ACM Digital Library, 40+ Book Chapters in various SCOPUS/WEB OF SCIENCE Indexed Books with Springer, CRC Press, Wiley, IET, Elsevier with Citations: 10000+, H-Index: 53 and I-Index: 190. Member of more than 60+ Associations as Senior and Life Member. He has authored/co-authored cum Edited 50+ Books of Computer Science. Associated with more than 600+ International Conferences as Programme Committee/Chair/Advisory Board/Review Board member. He has 18 Australian Patents, 7 German Patents, 4 Japanese Patents, 40 Indian Design cum Utility Patents, 4 UK Patent, 1 USA Patent, 3 Indian Copyrights and 2 Canadian Copyrights to his credit in the area of Wireless Communications, Artificial Intelligence, Cloud Computing, IoT, Healthcare, Drones, Robotics and Image Processing. Awarded 40 Awards for Teaching and Research—Young Scientist, Best Scientist, Best Senior Scientist, Asia Top 50 Academicians and Researchers, Young Researcher Award, Outstanding Researcher Award, Excellence in Teaching, Best Senior Scientist Award, DTU Best Professor and Researcher Award- 2019, 2020-2021, 2022 and many more. He is listed in Top 2% Scientists as per Stanford University (2020, 2021, 2022) , Ad Index (Rank No:1 Duy Tan University, Rank No:1 Computer Science in Viet Nam) and Listed on Research.com (Top Scientist of Computer Science in Viet Nam- National Ranking: 2; D-Index: 31). He is acting as Associate Editor for Wireless Networks (Springer), Computer Communications (Elsevier), International Journal of Sensor Networks (IJSNET) (Inderscience), Frontiers in Computer Science, PeerJ Computer Science, Human Centric Computing and Information Sciences (HCIS), Tech Science Press- IASC, IET-Quantum Communications, IET Wireless Sensor Systems, IET Networks, IJDST, IJISP, IJCINI, IJGC, IJSIR. He is acting as Managing Editor of IGI-Global Journal, USA titled "International Journal of Knowledge and Systems Science (IJKSS)" and Editor-in-Chief of IGI-Global, USA Journal titled "International Journal of Smart Vehicles and Smart Transportation (IJSVST)". He has reviewed more than 2500+ Articles for diverse Web of Science and Scopus Indexed Journals. He is currently researching in the area of Wireless Sensor Networks, Internet of Things, Swarm Intelligence, Cloud Computing, Artificial Intelligence, Drones, Blockchain, Cyber Security, Healthcare Informatics, Big Data and Wireless Communications.



Prof. Philip W. T. Pong

*PhD, FIET, FInstP, FIMMM, FEI, FHKIE, FNS,
SMIEEE, CEng, CPhys, R.P.E.*

Chartered Energy Engineer

Associate Professor

*Director - Green Technology Research and
Training Laboratory, Sensor Research
Laboratory*

***Title : Contactless Magnetic Sensing in Condition Monitoring and
Anomaly Detection for Smart Grid: New Possibilities and Alternatives***

Abstract: Our physical and cyber environments are becoming increasingly intertwined with smarter sensing, communication, and data analytics. Our daily livings are indeed surrounded by a wide variety of sensors, IoT connectivity, and edge computing devices, constituting smart grid, smart city, smart transportation, and so on. The availability of sensing devices with measurement, communication, and processing capabilities is providing fine-grained data. Together with multimodal sensory data collection and sensor fusion can result in actionable insights and decisions. This synergy can lead to improved ways and quality of life in what we call smart living.

Magnetism is one of the six energy forms of measurands in sensing. Magnetic sensing plays a critical role in smart living due to various sources of magnetic fields such as magnetic fields from current-carrying wires and permanent magnets which are geometrically determined by Biot-Savart Law and Ampere's Law respectively. These magnetic fields can range from DC to AC, from low frequency to high frequency. Modern civilization heavily relies on electricity which are generated, transmitted, and utilized through various kinds of transmission medium and electrical machines that are composed of current-carrying conductors, electromagnets, and permanent magnets. As such, magnetic field sensing is an important source of data and thus information for condition monitoring of power generation, transmission, and distribution.

In this talk, we will discuss the various opportunities and alternatives magnetic field sensing can offer in condition monitoring and anomaly detection in smart grid and smart city. Since it is contactless sensing, its installation is easy and it can be easily retrofitted to the existing plant and equipment. This will minimize cost, avoid wear and tear, and meet stringent reliability requirement. Contactless magnetic sensing can complement the traditional contact measurement techniques and help to overcome the major obstacle towards pervasive sensing due to its scalability.

Short Bio: Philip W. T. Pong received a B.Eng. from the University of Hong Kong (HKU) in 2002 with 1st class honours. Then he obtained a PhD in engineering at the University of Cambridge in 2005. He was a postdoctoral researcher at the Magnetic Materials Group at

the National Institute of Standards and Technology (NIST) for three years. Currently he is an Associate Professor in the Department of Electrical and Computer Engineering at New Jersey Institute of Technology (NJIT). His research interest focuses on the fault detection, predictive maintenance, and anomaly detection of power grid. He is the Founding Director of the Green Technology Research and Training Laboratory, leading the research and education activities of offshore wind energy at NJIT. Philip Pong is a Fellow of the Institution of Engineering and Technology (FIET), a Fellow of the Institute of Physics (FInstP), a Fellow of the Energy Institute (FEI), a Fellow of the Institute of Materials, Minerals and Mining (FIMMM), a Fellow of the Hong Kong Institution of Engineers (FHKIE), a Fellow of the NANOSMAT Society (FNS), a chartered physicist (CPhys), a chartered engineer (CEng), a chartered energy engineer, a registered professional engineer (R.P.E. in Electrical, Electronics, Energy), and a Senior Member of IEEE (SMIEEE). He serves on the editorial boards for several IEEE and SCI journals.



Prof. Mérouane Debbah

Chief Researcher at the Technology Innovation Institute in Abu Dhabi, New Jersey Professor at Centralesupelec, France

Title : Large Language Models for wireless: the next big thing?

Abstract: Large Language Models (LLMs) have shown remarkable success in natural language processing (NLP) tasks, such as language translation, text summarization, and sentiment analysis. They can also help in identifying network faults, improving network security, and facilitating spectrum sharing. LLM-based solutions can be trained on large-scale datasets to capture the heterogeneity and diversity of wireless networks. These models can be deployed on resource-limited devices, such as smartphones, to provide intelligent wireless services. Based on our recent announcement of FALCON LLM in march 2023 (<https://www.itp.net/emergent-tech/uae-owned-ai-language-model-outperforms-chatgpt3>), which is a foundational large language model (LLM) with 40 billion parameters, outperforming GPT 3, developed by the AI and Digital Science Research Center at TII, we will discuss our recent progress on LLM features and the potential of FALCON LLM in enabling intelligent wireless communication systems.

Short Bio: Mérouane Debbah is Chief Researcher at the Technology Innovation Institute in Abu Dhabi. He is a Professor at Centralesupelec (France) and an Adjunct Professor with the Department of Machine Learning at the Mohamed Bin Zayed University of Artificial Intelligence in Abu Dhabi. He received the M.Sc. and Ph.D. degrees from the Ecole Normale Supérieure Paris-Saclay, France. He was with Motorola Labs, Saclay, France, from 1999 to 2002, and then with the Vienna Research Center for Telecommunications, Vienna, Austria, until

2003. From 2003 to 2007, he was an Assistant Professor with the Mobile Communications Department, Institut Eurecom, Sophia Antipolis, France. In 2007, he was appointed Full Professor at CentraleSupélec, Gif-sur-Yvette, France. From 2007 to 2014, he was the Director of the Alcatel-Lucent Chair on Flexible Radio. From 2014 to 2021, he was Vice-President of the Huawei France Research Center. He was jointly the director of the Mathematical and Algorithmic Sciences Lab as well as the director of the Lagrange Mathematical and Computing Research Center. Since 2021, he is leading the AI & Digital Science Research centers at the Technology Innovation Institute. He has managed 8 EU projects and more than 24 national and international projects. His research interests lie in fundamental mathematics, algorithms, statistics, information, and communication sciences research. He holds more than 40 patents. He is an IEEE Fellow, a WWRF Fellow, a Eurasip Fellow, an AAIA Fellow, an Institut Louis Bachelier Fellow and a Membre émérite SEE. He was a recipient of the ERC Grant MORE (Advanced Mathematical Tools for Complex Network Engineering) from 2012 to 2017. He was a recipient of the Mario Boella Award in 2005, the IEEE Glavieux Prize Award in 2011, the Qualcomm Innovation Prize Award in 2012, the 2019 IEEE Radio Communications Committee Technical Recognition Award and the 2020 SEE Blondel Medal. He received more than 25 best paper awards, among which the 2007 IEEE GLOBECOM Best Paper Award, the Wi-Opt 2009 Best Paper Award, the 2010 Newcom++ Best Paper Award, the WUN CogCom Best Paper 2012 and 2013 Award, the 2014 WCNC Best Paper Award, the 2015 ICC Best Paper Award, the 2015 IEEE Communications Society Leonard G. Abraham Prize, the 2015 IEEE Communications Society Fred W. Ellersick Prize, the 2016 IEEE Communications Society Best Tutorial Paper Award, the 2016 European Wireless Best Paper Award, the 2017 Eurasip Best Paper Award, the 2018 IEEE Marconi Prize Paper Award, the 2019 IEEE Communications Society Young Author Best Paper Award, the 2021 Eurasip Best Paper Award, the 2021 IEEE Marconi Prize Paper Award, the 2022 IEEE Communications Society Outstanding Paper Award, the 2022 ICC Best paper Award, the 2022 IEEE GLOBECOM Best Paper Award, 2022 IEEE TAOS TC Best GCSN Paper Award, the 2022 IEEE International Conference on Metaverse Best Paper Award as well as the Valuetools 2007, Valuetools 2008, CrownCom 2009, Valuetools 2012, SAM 2014, and 2017 IEEE Sweden VT-COM-IT Joint Chapter best student paper awards. He is an Associate Editor-in-Chief of the journal Random Matrix: Theory and Applications. He was an Associate Area Editor and Senior Area Editor of the IEEE TRANSACTIONS ON SIGNAL PROCESSING from 2011 to 2013 and from 2013 to 2014, respectively. From 2021 to 2022, he served as an IEEE Signal Processing Society Distinguished Industry Speaker.



Prof. Dr. Faisal Shafait
Professor, SEecs, NUST

Director, TUKL-NUST Research & Development Center

President, Pakistani Pattern Recognition Society (PPRS)

Short Bio: Prof. Dr. Faisal Shafait has 15+ years of research and teaching experience in Artificial Intelligence and Machine Learning, primarily focusing on

computer vision and document image analysis. He completed his PhD in Computer Engineering from the Technical University of Kaiserslautern (TUKL), Germany in 2008 with the highest distinction. Currently, he is working as a Professor and is heading the Department of Computing at School of Electrical Engineering and Computer Science (SECS) as well as the Deep Learning Lab (DLL) under National Center of Artificial Intelligence (NCAI), NUST. Previously, he has worked as an Assistant Research Professor and is currently an Adjunct Professor at the University of Western Australia in Perth, Australia; as a Senior Researcher at the German Research Center for Artificial Intelligence (DFKI), Kaiserslautern, Germany, and Google Inc., Mountain View, USA. Dr. Faisal has made a significant international reputation in the field of Artificial Intelligence by earning 11,900+ citations with i10 and h indices of 161 and 53 (Google Scholar) respectively.

Oral Session

SESSION 1		Artificial Intelligence and its Applications, Friday 07, July 2023 10h15-12h45
Chairs	Prof.s: Ismail BOUMHIDI, Bensalem BOUKILI, Noredine CHAIBI	
Meet Link	https://meet.google.com/knk-macr-svk	
39	CHAHBI Anass "Artificial Intelligence and everyday challenges"	
80	Rachida HAMMADOU, Ghizlane KHAISSIDI, Mostafa Mrabti, Ghita Aboulem, Faouzi Belahsen "Machine Learning for early detection of Parkinson disease Systematic Review"	
58	Mustapha EL HANINE, Elhassane ABDELMOUNIM, Hicham OLDZIRA "The advantage of using the Pearson's Correlation Coefficient as a quantitative quality measurement unit for the electrocardiogram signal compression based on the Discrete Cosine Transform"	
85	Fatima Rahioui and Mohammed Ali Tahri Jouti "Learner's Understanding of the cellule's Concept by Artificial Intelligence"	
57	Sanae FILALI ZEGZOUTI, Oumayma BANOUAR, Mohamed BENSLIMANE "Comparative study of recent recommender systems using deep learning based generative models"	

SESSION 2		Electronics and Signal Processing Friday 07, July 2023 10h15-12h45
Chairs	Prof.s: Rachid EL ALAMI, Ali EL Yaacoubi and Ayoub Elbakri	
Meet Link	https://meet.google.com/uph-wkhy-dhx	
67	Mouaad Ait Errais, Khaoula Ait Belaid, Hassan Belahrach, Abdelouhab Zeroual "Novel Method Computing Crosstalk Between Deep submicron CMOS Interconnects"	

77	DAHOU Hamad, mezouari abdelkader, zemmouri abdelkarim, el gouri rachid, hou laamari "the help system for a deaf person based on arduino and the pulse width modulation (pwm)"
42	Nabil AQILI, Abderrahim BAZGAOU, Aziz BENAHMED, Abdelaziz SAADAOUII, Hicham LABRIM, Khalid EL MAJDOUB, Bouchaib HARTITI, Hamid. MARAH "New IoT Lux-Meter with High-Precision Light Sensor for Long-Term Data Recording"
36	Chakir El-Kasri, Amal Hader and Mohammed Alfi "Designing 2-D State Observers for Delayed Discrete Systems using LMIs"
33	Meryeme BOUOUCHMA, Brahim HERROU "Quality Function Deployment Impact on Product Development and production Processes"
53	KHAOULA TAJI, FADOUA GHANIMI "Deep Learning-Based Plant Disease Classification Using EfficientNetV2B3: Performance Evaluation and Model Optimization"

Renewable Energy Friday 07, July 2023 10h15-12h45	
SESSION 3	
Chairs	Prof.s.: EL OUGLI Abdelghani, CHARQI Mohammed and ELBAHJAOUI Radouane
Meet Link	https://meet.google.com/zkn-qmkw-wic
22	Younes ERRAMI, Hassan DEMRATI, Lahcen BOUIRDEN, Fatima Ezzahra ALLALI, Lahoucine GOURDO, Ahmed AHAROUNE, Ahmed WIFAYA "he effect of semi-transparent flexible solar panels on microclimate and lettuce production in photovoltaic canarian greenhouses"
30	EL HAMZAOU FATIMA ZAHRA "Comparison between Fuzzy Logic Control (FLC) and Perturb and Observe (P&O) in optimizing MPPT control for PV systems"
24	Manar ENNAOURI and El-Kaber HACHEM "Computational Study of Two-phase MHD Blood Nanofluid Flow through the porous artery"
75	Chayma Boutahiri , Ayoub Nouaiti, Aziz Bouazi and Abdallah Marhraoui Hsaini "Wind Turbine Emulator Using an AC Generator"
83	Elkarch Hajar, Elgouri Rachid and Mezouari abdelkader "RGB Dust Images Processing Approach for Dust Analysis on Photovoltaic Panels Using Computer Vision"

Antennas and Communication Systems Friday 07, July 2023 15h30-18h00	
SESSION 4	
Chairs	Prof.s.: Slimani Abdellatif and Bennani Saad Doss
Meet Link	https://meet.google.com/yxs-bjir-axt
73	HANAE MEJDOUB, MOHAMMED EL GHZAOU, RACHID EL ALAMI "The analog design of a voltage generator for passive UHF RFID Tag in 180nm CMOS technology"
52	Asmae Mimouni "Cost-Effective Miniature planar Antenna for Enhanced IoT Connectivity in Harbors"
46	Marouane Zaizoune, Brahim Herrou, Hassan Khadiri and Souhail Sekkat "Application of Fuzzy AHP method to study customer requirements and improve quality"

26	Nour El Houda Nasri, Mohammed El Ghzaoui and Mohammed Fattah "A novel 2x2 multiple input multiple output antenna with enhanced bandwidth for 38 GHz 5G applications"
43	Abdelhadi ENNAJIH, Azzeddine SARDI, Ahmed ERRKIK, and Jamal ZBITOU "Design of Smartwatch Antenna For 5G and WLAN Connectivity"
79	Youssra Sadki, Mohammed Ali Ennasar, Mohsine Khalladi, Otman El Mrabet, Mariem Aznabet "A pair spiral Beam Steering antenna for WiMax and WLAN applications"

SESSION 5		Materials Sciences and Applications Friday 27, July 2023 15h30-18h00	
Chairs	Prof.: Talha Lamiae, Badre Bossoufi and Jamal Mestoui		
Meet Link	https://meet.google.com/ikw-bcgc-xtk		
21	Mohamed Alla "Defect Study and Modelling of Cs2AgSbF6 Based perovskite solar cell with efficiency exceeding 28%"		
61	Mouad BEN-NANA1, Abderrahmane ABBASSI and El hadadi BENACHIR "The Potential integration of <i>Ba2InSbO6</i> Double Perovskite Oxides for electronic devices fabrication"		
34	Hamza Kerrai, Ahmed Zaim, Mohamed Kerouad "Electronic, magnetic and magnetocaloric properties of Ba2FeReO6 double perovskite: Ab-initio and Monte Carlo studies"		
60	KARROUMI Abdel-alli, JBARI Atman, JILBAB Abdelilah "Improved linearity of the ESP32-ADC SoC for ECG signal acquisition"		
50	TAHIRI Omar, HERROU Brahim "Help in choosing risk analysis methods for industrial installations"		

SESSION 6		Wireless and wired Communication Systems Friday 07, July 2023 15h30-18h00	
Chairs	Prof. : Ali EL ALAMI & El-Mahjoub BOUFOUNAS & Jebbor Nawfal		
Meet Link	https://meet.google.com/vye-kqru-txd		
48	Abdelmounim HMAMOU, Jaouad FOSHI, Bilal Aghoutane, Serghini Elaage "Channel Propagation Modeling in the Terahertz context"		
27	OUAFAE ELALAOUY, MOHAMMED EL GHZAOUI, JAOUAD FOSHI "Mutual Coupling Reduction of a Two-Port MIMO Antenna Using Defected Ground Structure"		
45	Kaoutar Elbakkar, Mohammed El Ghzaoui, Ali El Alami "Design of triple-band pass filter using split ring resonators for wireless communication systems"		
71	SERGHINI ELAAGE, MOHAMMED ELGHZAOUI, NABIL MRANI, ABDELMONIM HMAMOU "An intelligent PAPR reduction for an OFDM system using linear programming"		

49	Abdelmounim HMAMOU, Jaouad FOSHI, Bilal Aghoutane, Serghini Elaage "Impact of Common-Mode Radiation on the Performance of MIMO-PLC Channel"
81	Redwane Ben Talha, Asmaa Zugari and Souhaila Zugari "Design of Microstrip Bandpass T-Shaped resonator using Parallel Coupled Lines for 5G Application"

SESSION 7	
Optics, Circuits and Systems Saturday 08, July 2023 10h00-12h30	
Chairs	Profs.: Hanan EL FAYLALI, Ismail LOURAGLI and Bilal AGHOUTANE
Meet Link	https://meet.google.com/pez-ogmc-kzu
44	Oussama Aoun and Abdellatif El Afia "Data-driven Reinforcement Learning Approach with optimization-based policy for Airline Crew Pairing Control"
23	Brahim Lamine, Mouhssine Ait Said and Driss Mgharaz "Synchronization phenomenon in Erbium-doped fiber ring laser system with two-delayed feedbacks"
68	B. El Mechate , A. Chafiq, A. Belafhal "Effect of the rotation repetitions of the Non-diffracting beams angular spectrum on the propagation properties through Cassegrain antenna system in weak turbulence"
70	M. Bassit, M. Boudalia, A. Bellaouchou "Electrochemical impedance spectroscopy study of corrosion characteristics of Co-Cr alloy in artificial saliva"
84	Fatima Rahioui and Mohammed Ali Tahri Jouti "Enhancing Biological Concept Comprehension through Machine Learning"
29	Fatima kiouach, Bilal Aghoutane, Mohammed EL GHZAOUI "Novel Microstrip Bandpass Filter for 5G Millimeter-Wave Communications"

SESSION 8	
Applications of Machine Learning Saturday 08, July 2023 10h00-12h30	
Chairs	Profs.: Hassan Hassouny and Adil Ben-Hdech
Meet Link	https://meet.google.com/gem-mhgy-ynx
32	EL MESOUDY Mouad, FOULKI Rida, M'LAHFI Basma, AMEGOUZ Driss "Effect of printing parameters in 3D concrete printing: Extrusion rate, nozzle travel speed and nozzle size"
31	Mohammed Chaker AKALY NOUINOU, Asmaa ZUGARI, Ahmed BOUTTA "Comparison and evaluation of boundary conditions in an FDTD-1D simulation"
62	Ben yahia abdellah, Iman Kadir et Abdelaziz Abdallaoui "Use of ANN for the development of a high-performance mathematical model for the prediction of relative humidity in the Tangier city"

54	EL MENIARI KHALIL NADA ELGMILI Abderrahim Fakkar “Hardware Implementation of Particle Swarm Optimization Algorithm on FPGA Cyclone V”
59	Sara Rhouas, Norelislam el hami “predicting electricity consumption in a smart grid system using the Random Forest algorithm”

SESSION 9	
Fuzzy Systems and Artificial Intelligence Saturday 08, July 2023 10h00-12h30	
Chairs	Prof.s: Sudipta Das, Vasu Babu and Abdelmounim HMAMOU
Meet Link	https://meet.google.com/fcg-zgym-kja
63	Iliass BAHITE, Mustapha EL HANINE and Taha AATAR “EOG based communication system for patients with Locked-In Syndrome”
55	Mohammed Qorich and Rajae El Ouazzani “BERT-based model for diseases conditions classification”
66	Iman KADIR, Abdellah BEN YAHIA, Abdelaziz ABDALLAOUI “Development of mathematical models for the prediction of relative humidity using MLP and RBF neural networks in the city of Fez (Morocco)”
69	Mohamed Gramz, Mouhcine Batchi , Moulay Hicham Azagane, Adnane El-Boukhari , Youssef Elharrari and Mehdi Metouchi “Quantifying climate change on surface water resources using artificial intelligence - the case of the Ain Kwachia dam between 2008 and 2021”
88	Amina El Morhit, Mohamed El Morhit and Mimoun Zouhdi “Quantification of the production of solid medical waste from the public hospital center in Tangier - Morocco“
47	Marouane Zaizoune, Brahim Herrou, Hassan Khadiri and Souhail Sekkat “Fuzzy AHP method to study customer requirements: Literature review”
65	NEBRI Mohamed-Amine, BOUIKHALENE Belaid “Modeling of fertilizer product sales in agriculture using machine learning techniques: A case study in the Sous Massa Region, Morocco”



International Conference on Circuit, Systems and Communication

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