



Conference Program

June 28-29, 2024, 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 2024, and we look forward to a successful and inspiring conference!



Prof. Mohammed EL GHZAOU
Chairman of ICCSC2024

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Friday, 28 June 2024 (GMT+1)

8h30-9h00

Welcoming Participants

Official Opening of the Conference
Moderator: Prof. ECH-CHADI Youness,
Ibn Tofail University

9h00-9h15

Prof. Mohammed Nabil KABBAJ,
*Vice Dean of Faculty of Sciences Dhar El
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Prof. Mohammed El Ghzaoui
*Iccsc'24 Chair
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Meet Link

[Link to the Session](https://meet.google.com/dsc-skey-kgc) (<https://meet.google.com/dsc-skey-kgc>)

Plenary Session 1: Mohamed LAZAAR, ENSIAS, Mohammed V University, Rabat, Morocco

9h15-10h00

❖ *Speaker Lecture: PROF. Farhad Shahnia, Murdoch University, Australia*

“MICROGRIDS AND VIRTUAL POWER PLANTS – EXCITING PLATFORMS FOR NET ZERO EMISSIONS”

10h00-12h00

Oral Session 1 Antennas and propagation I
Oral Session 2 Control and AI
Oral Session 3 Renewable energy I
Oral Session 4 Data sciences I
Oral Session 5 Telecommunications
Oral Session 6 Embedded systems
Oral Session 7 Advanced Material Science
Oral Session 8 Natural language processing
Oral Session 9 AI and Applications
Oral Session 10 Renewable Energy II

Meet Link

[Link to the Session](https://meet.google.com/dsc-skey-kgc) (<https://meet.google.com/dsc-skey-kgc>)

15h00-15h30

Plenary Session 2: DR. OSAMAH IBRAHIM KHALAF, AL-NAHRAIN UNIVERSITY, IRAQ

❖ *Speaker Lecture: PROF. PHILIP W. T. PONG, New Jersey Institute of Technology,
United States of America*

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

15h30-17h30

Oral Session 11 Telecommunication and signal processing
Oral Session 12 Antennas and propagation II
Oral Session 13 Control

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Oral Session 14 Renewable energy II
Oral Session 15 Material Sciences
Oral Session 17 IoT applications
Oral Session 18 Data Sciences II
Oral Session 19 Embedded systems, IoT and AI

Saturday, 29 June 2024 (GMT+1)

Link to the Session (<https://meet.google.com/dsc-skey-kgc>)

Plenary Session 3: DR. GHADA MUTTASHAR ABDULSAHIB, UNIVERSITY OF TECHNOLOGY, IRAQ

09h00-09h30

❖ **Speaker Lecture: PROF. Suraya Masrom, Universiti Teknologi MARA, Malaysia**

“METAHEURISTICS-BASED MACHINE LEARNING: A NEW FRONTIER IN OPTIMIZATION”

Oral Session 20 Data Sciences and IoT
Oral Session 21 Data Sciences III
Oral Session 22 Image processing
Oral Session 23 Healthcare sector
Oral Session 24 Machine learning application
Oral Session 25 Emergent technologies
Oral Session 26 Blockchain

09h30-11h30

Oral Session 27 Artificial neural network, data science and detection
Oral Session 28 Detection and AI Techniques Machine learning application
Oral Session 29 Material sciences and Machine learning application
Oral Session 30 AI and Data Science
Oral Session 31 Control and Emerging Technologies

Keynote

Assoc. Prof. Dr. Suraya Masrom

Associate Professor Ts Dr. Suraya Masrom holds a Doctor of Philosophy in Information Technology and Quantitative Sciences from Universiti Teknologi MARA (UiTM) obtained in 2015. She also earned her Master of Computer Science from Universiti Putra Malaysia in 2001 and her Bachelor and Diploma in Computer Science from Universiti Teknologi Malaysia in 1996 and 1994, respectively. She began her academic career as a young lecturer in 1998, demonstrating a strong commitment to education and research. Over the years, she has progressed through various academic ranks, becoming an Associate Professor in 2019. Her teaching portfolio is extensive, covering a wide range of subjects, including Algorithm Analysis and Design, Fundamentals of Data Structures, Computer Security, and numerous other courses across undergraduate and postgraduate levels. In the realm of research, Dr. Suraya's interests are both diverse and impactful, with a focus on Big Data, Machine Learning, and Optimization. As the Head of the Machine Learning and Interactive Research Group (MaLIV) from 2020 to 2023, she spearheaded initiatives that pushed the boundaries of machine learning applications and data analytics. Her role as Chairman of the Big Data Task Force and Director of Big Data Talent further highlights her leadership in advancing big data competencies, where she facilitated training and certification programs in Cloudera, Hadoop, Python, and Machine Learning. A significant area of Dr. Suraya's research is metaheuristics-based optimization. She has conducted in-depth studies on algorithms such as Particle Swarm Optimization, Evolutionary Algorithms, and Bee Colony Optimization, applying these to solve complex optimization problems across various domains. Her pioneering work in this field has significantly contributed to optimizing machine learning pipelines, enhancing model performance, and efficiency—a critical advancement in the field of artificial intelligence.



****Abstract: Metaheuristics-Based Machine Learning: A New Frontier in Optimization****

Metaheuristics, a class of optimization algorithms, has garnered significant attention due to their robust capability in solving complex optimization problems across various domains. These algorithms, including Particle Swarm Optimization (PSO), Evolutionary Algorithms (EAs), Ant Colony Optimization (ACO), Bee Colony Optimization (BCO), and Genetic Algorithms (GAs), offer versatile and efficient solutions to problems that are often non-linear, multi-modal, and high-dimensional. Metaheuristics are inspired by natural processes and biological systems, allowing them to explore and exploit the search space effectively. Their applications range from engineering design, scheduling, and resource allocation to network design, image processing, and bioinformatics. Recently, metaheuristics have emerged as a promising solution for optimizing machine learning (ML) pipelines. A machine learning pipeline consists of several stages, including data preprocessing, feature selection, model selection, hyperparameter tuning, and model evaluation. Each stage involves numerous decisions that significantly impact the overall performance of the ML model. However, optimizing these stages is challenging due

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to the vast search space and complex interactions between different components. The integration of metaheuristics into ML pipelines addresses these challenges by providing an efficient search mechanism to explore various pipeline configurations. Metaheuristics can optimize hyperparameters, select the most relevant features, and even design new model architectures, leading to improved model accuracy, robustness, and generalization. The optimization of ML pipelines can thus lead to significant advancements in areas such as predictive analytics, natural language processing, and computer vision. In this keynote, I will share my findings on the application of various metaheuristics in optimizing ML pipelines. Through extensive experimentation, I have explored the use of tools and software such as TPOT Python and Auto Model RapidMiner to implement and test these algorithms. The results demonstrate that metaheuristics not only enhance the performance of ML models but also streamline the development process by automating the tedious and time-consuming task of pipeline configuration.

Assoc. Prof. Dr. Farhad Shahnia



A/Professor Farhad Shahnia received his PhD in Electrical Engineering from Queensland University of Technology (QUT), Brisbane, in 2012. He is currently an A/Professor at Murdoch University. Before that, he was a Lecturer at Curtin University (2012-15), a research scholar at QUT (2008-11), and an R&D engineer at the Eastern Azarbayjan Electric Power Distribution Company, Iran (2005-08). He is currently a Fellow member of Engineers Australia, Senior Member of IEEE, and member of the Australasian Association for Engineering Education. Farhad's research falls under Distribution networks, Microgrid and Smart grid concepts. He has authored one book and 11 book chapters and 250+ peer-reviewed scholarly articles in international conferences and journals, as well as being an editor of 6 books. Farhad has won 5 Best Paper Awards in various conferences and has also received the IET Premium Award for the Best Paper published in the IET Generation, Transmission & Distribution journal in 2015. One of his articles was listed under the top-25 most cited articles in the Electric Power System Research Journal in 2015 while one of his 2015 journal articles has been listed under the top-5 most read articles of the Australian Journal of Electrical and Electronics Engineering. He was the recipient of the Postgraduate Research Supervisor Award from Curtin University in 2015 and the Australia-China Young Scientist Exchange Award from the Australian Academy of Technology and Engineering in 2016.

Farhad is currently a Subject Editor, Deputy Subject Editor, and Associate Editor of several journals including IEEE Access, IET Generation, Transmission & Distribution, IET Renewable Power Generation, IET Smart Grid, IET Energy Conversion and Economics, and International Transaction on Electrical Energy Systems and has served 40+ conferences in various roles such as General, Technical, Program, Publication, Publicity, Award, Sponsorship, and Special Session Chairs. Farhad has led the IEEE Western Australia Section as the 2020-2021 Chair, and was the 2019 Founding Chair of the IEEE Western Australia Industrial Electronics Society (IES) Chapter. He was the 2023 Vice-chair of the IES's Technical Committees on Smart Grids.

**** Abstract: "Microgrids and Virtual Power Plants – Exciting Platforms for Net Zero Emissions" ****

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Electricity systems around the world are experiencing a radical transition as the consequence of replacing fossil fuels, used for electricity production, by sustainable and cleaner energies. The growing penetration of renewable energies requires smarter techniques capable of handling the uncertainties of these intermittent sources. Along with this change, traditionally centralised power systems are also converting into distributed self-sufficient systems, often referred to as microgrids, that can operate independently. Virtual power plants are frameworks under which microgrids can be deployed within communities and enable energy transaction amongst retailers, customers and private investors. This talk will focus on the role of microgrids and virtual power plants in decarbonisation of the energy sector and net zero emissions, and will discuss their technical, economic, and regulatory aspects.

Assoc. Prof. Dr. Philip W. T. Pong



Philip W. T. Pong received a B.Eng. from the University of Hong Kong (HKU) with 1st class honours. Then he obtained a PhD in engineering at the University of Cambridge. 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.

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

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.

Oral Sessions

SESSION 1	Antennas and propagation I, Friday 28, July 2024 10h00-12h00
CHAIRS	SOUFIAN LAKRIT, UNIVERSITÉ MOHAMMED PREMIER RAJI CHANDRAN, COLLEGE OF ENGINEERING AND TECHNOLOGY HANAN EL FAYLALI, IBN TOFAIL UNIVERSITY
Meet Link	https://meet.google.com/png-pagh-jzi
28	A QUAD-BAND FLEXIBLE ANTENNA FOR TERAHERTZ APPLICATIONS <i>Authors: Amraoui Youssef, Zahra Oughannou, Imane Halkhams, Abdennabi Morchid, Rachid El Alami, Mohammed Ouazzani Jamil, Hassan Qjidaa</i>
37	HIGH ISOLATION AND GAIN METAMATERIAL-BASED MIMO ANTENNA FOR 5G MILLIMETER WAVE APPLICATIONS <i>Authors: Ouafae Elalaouy, bilal aghoutane, Mohammed El Ghzaoui, Sudipta Das, Jaouad Foshi and Hanan El Faylali</i>
68	OPTIMIZED DESIGN AND PERFORMANCE EVALUATION OF A HIGH-GAIN 4X4 ARRAY PATCH RECTENNA FOR 5G NETWORKS <i>Authors: Nasredine BOUJAMIL, Abdelhafid ES-SAQY, Mohammed Mahfoudi, Wafae EL HAMDANI, Mohammed Fattah, Said Mazer, Moulhime Elbekkali</i>
53	A NOVEL HIGH ISOLATION 4-ELEMENTS MIMO ANTENNA FOR 5G APPLICATIONS <i>Authors: Nour El Houda Nasri</i>
84	ADVANCED STUDY AND DESIGN OF A FLEXIBLE MIMO CIRCULAR PATCH ANTENNA ARRAY FOR 5G COMMUNICATION AT 2.45 GHZ <i>Authors: Salah-Eddine DIDI, Imane HALKHAMS, Abdelhafid ES-SAQY, Mohammed FATTAH, Said MAZER, Moulhime EL BEKKALI</i>
94	AN IMPROVEMENT PERFORMANCE OF A NOVEL TRIPLE-BAND MICROSTRIP ANTENNA DESIGN BASED ON A HEXAGONAL PATCH AND TRUNCATION IN THE GROUND FOR RF ENERGY HARVESTING SYSTEMS <i>Authors: Walid En-naghma, Hanan Halaq, Abdelghani El Ougli</i>
271	INFLUENCE OF STRUCTURAL PARAMETERS ON RESONANCE FREQUENCY OF A SPLIT-RING RESONATOR <i>Authors: Hicham AKKAOUI, Nawfal JEBBOR</i>

SESSION 2	Control and AI Friday 28, July 2023 10h00-12h00
CHAIRS	EL-MAHJOUB BOUFOUNAS, MOULAY ISMAIL UNIVERSITY EL HOUSSAINE TISSIR, SIDI MOHAMED BEN ABDELLAH, MOROCCO UNIVERSITY
Meet Link	https://meet.google.com/svw-cqjc-gkp
263	MODELING AND ANALYSIS OF INDUCTION MACHINE CONSIDERING THE EFFECTS OF SATURATION <i>Authors: MUSTAPHA ES-SEMYHY</i>
330	CONSTRAINED K-MEANS++ FOR MULTI-CONTROLLER PLACEMENT LOAD BALANCE <i>Authors: Aymen Chentouf, Mounia Miyara, Zouhair Chiba</i>
93	A NOVEL COMBINATION OF SLIDING MODE, FRACTIONAL CALCULUS, AND GENETIC ALGORITHM TO IMPROVE THE PERFORMANCE OF A CONTROLLER IN A WIND POWER APPLICATION <i>Authors: Yattou EL FADILI, Youssef Berrada, Ismail Boumhidi</i>
320	MACHINE LEARNING ANALYSIS OF LITHIUM-ION BATTERY BEHAVIOR AND PREDICTION <i>Authors: Mohammed Fattah</i>
368	SYSTEMATIC REVIEW OF THE AUTOMOTIVE TESTING METHODOLOGIES <i>Authors: Soulaïman Laaroussi</i>
204	AUTOMATION OF TRADITIONAL NETWORKS : A MINI-REVIEW <i>Authors: Omar Altalebi</i>

SESSION 3	Renewable energy I Friday 28, June 2024 10h00-12h00
CHAIRS	ISMAIL BOUMHIDI, SIDI MOHAMMED BEN ABDELLAH UNIVERSITY AYOUB EL BAKRI, SIDI MOHAMMED BEN ABDELLAH UNIVERSITY ALI EL YAAKOUBI, SIDI MOHAMED BEN ABDELLAH UNIVERSITY
Meet Link	https://meet.google.com/pcv-wnhg-igr
181	IMPROVING SOLAR ENERGY MONITORING: ADVANCED DEEP LEARNING PREDICTIVE MODEL FOR PHOTOVOLTAIC POWER GENERATION <i>Authors: Mohamed KHALA, Naima EL YANBOIY, Ismail ELABBASSI, Omar ELOUTASSI, Mohammed HALIMI, Youssef EL HASSOUANI, Choukri MESSAOUDI</i>
328	DEGRADATION ANALYSIS OF CRYSTALLINE SILICON AND THIN-FILM PV MODULES OPERATING OUTDOORS IN TWO DIFFERENT US CLIMATES <i>Authors: Youssef BOUASRIA, Mhammed ZAIMI, Khadija EL AINAQUI, EL mahdi ASSAID</i>

266	HIGH VOLTAGE FLYBACK CONVERTER FOR COLD PLASMA GENERATION <i>Authors: Achraf Hani, Lahoucine Elmahni, Alyen Abahazem, Nofel Merbahi</i>
131	ENHANCEMENT OF THE PERFORMANCE OF SOLAR CELLS BASED-CIGSE BY USING SCAPS-1D <i>Authors: Mohamed Hamdaoui, Lhoussayne Et-taya, Jaouad Foshi, Najim Mansour, Abdellah Benami</i>
173	DOUBLE INTEGRAL SLIDING MODE BASED MPPT CONTROLLER FOR A PHOTOVOLTAIC SYSTEM UNDER VARYING ATMOSPHERIC CONDITIONS <i>Authors: EL IDRISSE Ibrahim</i>
262	MODELING ENDOTRACHEAL TUBE RESISTANCE IN RESPIRATORY SYSTEM AND ITS EFFECTS ON GAS EXCHANGE DURING PRESSURE-CONTROLLED MECHANICAL VENTILATION <i>Authors: Mohamed Bourti, Abdelaziz Belaguid</i>

SESSION 4	Data sciences I Friday 28, June 2024 10h00-12h00
CHAIRS	MOURAD FARISS, ABDELMALEK ESSAÂDI UNIVERSITY BILAL AGHOUTANE, IBN TOUFAL UNIVERSITY NABIL MRANI, MOULAY ISMAIL UNIVERSITY
Meet Link	https://meet.google.com/zzm-ggdy-veb
253	PSYCHOLOGY POINT OF VIEW: GAME ADDICTION BASED ON USER EXPERIENCE USING THE GEQ (UX) METHOD <i>Authors: Nursafika, Muhammad Luthfi Hamzah, Idria Maita, Megawati, Salmiyati</i>
259	FEATURE SELECTION IN SUPPORT VECTOR MACHINE AND RANDOM FOREST ALGORITHMS FOR THE CLASSIFICATION OF RECIPIENTS OF THE SMART INDONESIA PROGRAM <i>Authors: Nanda Try Luchia, Mustakim, Noviarni, Kelik Sussolaikah, Teguh Arifianto</i>
270	AN EARLY STUDENT PERFORMANCE PREDICTION USING GRU MODEL <i>Author: Abdelmajid ELHAJOU</i>
241	THE EVOLUTION OF TRANSFORMERS IN EDUCATION: A LITERATURE REVIEW <i>Authors: Chaimaa Bouafoud, Abdellah Madani, Khalid Zine-Dine</i>
130	A NEW APPROACH TO ENHANCE PRODUCTS QUALITY DURING THE REDESIGNING PROCESS <i>Authors: Meryeme BOUOUCHMA Brahim HERROU</i>
104	FEDERATED LEARNING FOR CREDIT CARD FRAUD DETECTION: KEY FUNDAMENTALS AND EMERGING TRENDS <i>Authors: Taoufik El Hallal, Yousef El Mourabit</i>
261	INNOVATIVE SOLUTION FOR ENHANCING MECHANICAL WATER METERS: A SMART WATER METER ADD-ON <i>Authors: YOUNESS CHAKIR, ABDESSADEK AAROUD</i>

SESSION 5	Telecommunications Friday 28, June 2024 10h00-12h00
CHAIRS	ANVESHKUMAR NELLA, VIT BHOPAL UNIVERSITY YOUNES ERROUAS, UNIVERSITE MOHAMMED PREMIER HANAN HALAQ, SIDI MOHAMED BEN ABDELLAH UNIVERSITY
Meet Link	https://meet.google.com/hak-rduz-jfe
25	A NEW COMPACT BANDPASS FILTER FOR 5G MILLIMETER-WAVE COMMUNICATIONS <i>Authors: Fatima KIOUACH, Mohammed EL GHZAOUI, Sudipta DAS</i>
321	MODELING THZ ANTENNAS: OVERCOMING DESIGN CHALLENGES AND ADVANCING TECHNOLOGIES <i>Authors: Nabil Meskini, Hamid Bezzout, Bilal Aghoutane, Hanan El Faylali</i>
33	MODELING FREE VIBRATION PROPAGATION IN 2D CUBIC FGM CYLINDERS WITH IMPLEMENTED BOUNDARY CONDITIONS EFFECTS <i>Authors: Rabab RAGHIB; Ismail Naciri; Hassna KHALFI; Lahoucine ELMAIMOUNI; Jiangong YU; Abdellah BENAMI</i>
134	MONOGENIC WAVELET BASED FILTERING FOR OPTICAL FRINGE PATTERNS DENOISING <i>Authors: Sina Baya</i>
205 (#G2)	ADVANCING DATA TRANSMISSION SECURITY IN PUBLIC CHANNELS VIA SYNCHRONIZED ERBIUM-DOPED FIBER LASERS <i>Author: Brahim Lamine</i>
372	ANALYSIS OF IOT HEALTH DATA: STATE OF THE ART AND RESEARCH OPPORTUNITIES <i>Authors: Zineb sqalli houssaini, Younes balboul, anas bouayad</i>

SESSION 6	Embedded systems Friday 28, June 2024 10h00-12h00
CHAIRS	ATIF RACHID, IBNOU ZOHR UNIVERSITY MUSTAPHA EL ALAOUI, MOHAMMED V UNIVERSITY BADRE BOSSOUFI, SIDI MOHAMED BEN ABDELLAH UNIVERSITY
Meet Link	https://meet.google.com/smm-bndn-gpm
178	A HYBRID VEHICLE TRACKING SYSTEM FOR LOW-POWER EMBEDDED DEVICES <i>Authors: Ayoub El-alami, Younes Nadir, khalifa Mansouri</i>
269	MAINTENANCE 4.0 USING INTELLIGENT ULTRASONIC SENSORS <i>Authors: Amar Bakdid, Ali El Kihel and Bachir EL Kihel</i>
303	INTELLIGENT EEG ARTIFACT REMOVAL IN MOTOR IMAGERY BCI: SYNERGIZING FCIF, FCBCSP, AND MODIFIED DNN WITH SNR, PSD, AND SPECTRAL COHERENCE EVALUATION <i>Authors: Srinath Akuthota , K.Rajkumar , Ravichander Janapati</i>

324	DESIGN OF A LOW POWER HIGH SPEED FLASH ADC <i>Authors: Nampally Saikiran Varma, Naspuri Pavan, Mootapelli Deepak, K. Jamal</i>
335	A HIGHLY LINEAR MIXER-FIRST RECEIVER FRONT-END WITH AUTOMATIC GAIN CONTROL <i>Authors: Mustafa Berke Yelten</i>
343	CRYPTOGRAPHICALLY ROBUST PSEUDO-RANDOM BINARY SEQUENCE GENERATOR BASED ON THE INTEGRATION OF LFSRS AND CAS <i>Authors: Lahcen Oumouss, Younes Asimi, Ahmed Asimi and Rguibi Arjdal</i>
166	CLOUD AND EDGE BASED SMART AGRICULTURE : A REAL-WORLD DEPLOYMENT <i>Authors: Bouali Et-taibi, Mohamed Riduan Abid, EL-Mahjoub Boufounas , and Driss Benhaddou</i>

SESSION 7	Advanced Material Science Friday 28, June 2024 10h00-12h00
CHAIRS	MOHAMED NAJI, SIDI MOHAMED BEN ABDELLAH UNIVERSITY FILALI MOHAMMED, SIDI MOHAMED BEN ABDELLAH UNIVERSITY ENRICA EPIFANO, DELFT UNIVERSITY OF TECHNOLOGY
Meet Link	https://meet.google.com/qyu-qoht-ogk
31	PERFORMANCE ANALYSIS OF ZIRCONIUM SULFIDE (ZRS2) AS A BUFFER LAYER FOR SB2SE3 SOLAR CELLS: NUMERICAL MODELING <i>Authors: Abdelmajid El Khalfi, Kaoutar Ridani, Lhoussayne Et-taya, Najim Mansour, Abderrahman El Boukili, Lahoucine Elmaimouni, Abdellah Benami</i>
32	VIBRATIONAL ANALYSIS OF TRANSVERSE-TYPE DISK PIEZOELECTRIC TRANSFORMERS USING LEGENDRE POLYNOMIAL METHOD <i>Authors: Hassna Khalfi, Ismail Naciri, Rabab Raghieb, Lahoucine Elmaimouni, Faniry Emilson Ratolojanahary, Abdellah Benami</i>
63	HEAT TRANSFER PERFORMANCE OF AL2O3/H2O NANOFLUID NATURAL CONVECTION BY USING LBM <i>Authors: Younes Oulahou, Youssef Elguennouni, Mohamed Hssikou, Jamal Baliti, Mohammed Alaoui</i>
92	PRESSURE EFFECT ON THE STRUCTURAL AND OPTO-ELECTRONIC PROPERTIES OF PB2SCSBO6 DOUBLE PEROVSKITE <i>Authors: Mouad BEN-NANA, Abderrahman Abbassi, Elhadadi Benachir</i>
76	GRADIENT EFFECT ON GUIDED WAVE PROPAGATION IN FUNCTIONALLY GRADED PIEZOELECTRIC CYLINDRE: AN EXTENDED POLYNOMIAL APPROACH <i>Authors: Khalid Ait Cheikh, Rabab Raghieb, Ismail Naciri, Lahoucine Elmaimouni, Jiangong YU, Abdellah BENAMI</i>
78	MODELING ELECTRODE THICKNESS EFFECT IN PIEZOELECTRIC DISC-TYPE RESONATOR: AN EXTENDED POLYNOMIAL APPROACH <i>Authors: Zakaria Ech-chaachoui, Hassna Khalfi, Ismail Naciri, Lahoucine Elmaimouni, Abdellah Benami, Yu Jiangong</i>

SESSION 8	Natural language processing Friday 28, June 2024 10h00-12h00
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CHAIRS	BOUCHAIB CHERRADI, CRMEF CASABLANCA-SETTAT BADRADDINE AGHOUTANE, MOULAY ISMAIL UNIVERSITY ALI YAHYAOUY, SIDI MOHAMED BEN ABDELLAH UNIVERSITY
Meet Link	https://meet.google.com/hrq-aiwx-htg
426	LITERATURE REVIEW: NLP TECHNIQUES FOR ARABIC DIALECT RECOGNITION <i>Authors: YASSINE EL KANEB, MOHCINE KODAD</i>
411	FROM TEXT-BASED SYSTEM SPECIFICATIONS TO UML DIAGRAMS: A BRIDGE BETWEEN WORDS AND MODELS <i>Authors: Zakaria Babaalla, El Mahi Bouziane, Abdeslam Jakimi, Mohamed Oulala</i>
402	A SURVEY OF LEGAL TEXT ANALYSIS TECHNIQUES FOR INDIAN LEGAL DOCUMENTS <i>Authors: Trisha Ghosh</i>
264	INSIDER THREAT IDENTIFICATION FROM ACCESSED WEBSITE CONTENT OPTIMIZED BY MODIFIED METAHEURISTIC <i>Authors: Luka Jovanovic, Jelena Kaljevic, Miodrag Zivkovic, Nebojsa Bacanin, Milos Antonijevic, Miroslav Cajic</i>
142	INSIDER THREAT DETECTION USING BIDIRECTIONAL ENCODER REPRESENTATIONS FROM TRANSFORMERS AND OPTIMIZED ADABOOST CLASSIFIER <i>Authors: Katarina Kumpf, Mihajlo Protic, Luka Jovanovic, Miroslav Cajic, Miodrag Zivkovic, Nebojsa Bacanin</i>
367	A NEW APPROACH FOR AUTOMATIC TEST CASE GENERATION FROM USE CASE DIAGRAM USING LLMS AND PROMPT ENGINEERING <i>Authors: Lahbib Naimi, El Mahi Bouziane, Mohamed Manaouch, Abdeslam Jakimi</i>

SESSION 9	AI and Applications Friday 28, June 2024 10h00-12h00
CHAIRS	YOUSEF FARHAOUI, MOULAY ISMAIL UNIVERSITY EL MALLAHI MOSTAFA, SIDI MOHAMED BEN ABDELLAH UNIVERSITY
Meet Link	https://meet.google.com/mqr-orib-fuu
82	AVTAR CYBER SHIELD: A COMPREHENSIVE FRAMEWORK FOR MACHINE LEARNING-ENHANCED CYBERSECURITY IN CYBER-PHYSICAL ENVIRONMENT <i>Authors: Venkata Narendra Kumar Sykam, Ayush Goyal, Mais Nijim, Avdesh Mishra, David Hicks</i>
336	OPTIMAL DELIVERY POSITIONING ALGORITHM USING CLUSTERING <i>Authors: Agnel Elizabeth, Ayush Muralidharan, Nilkhil Harsha, Tejas V Bhat and Srinivas KS</i>
390	EXPLORING THE RELATIONSHIP BETWEEN RENT AND FLAT PRICES THROUGH RANDOM FOREST AND GRID SEARCH <i>Authors: Joyita Ghosh, Kalyan Maji, Toufik Mzili, Priyanka Roy, Monalisa Chakraborty, and Subir Gupta</i>
413	DEEP LEARNING-DRIVEN FORECASTING OF MOROCCAN FDI: AN LSTM-BASED APPROACH <i>Authors: Amine CHENTOUF, Jihad Ait Soussane, Zahra Mansouri</i>
425	OPTIMIZING EMPLOYEE SATISFACTION WITH HEALTH AND SAFETY USING COMPUTATIONAL MODELS AND MACHINE LEARNING <i>Authors: Abhik Choudhary, Sandip Mukherjee, Bhaswati Roy, Indrani Sengupta, Kalyan Maji, Subir Gupta</i>
242	ENHANCING ELECTRICAL TRANSFORMER FAULT PREDICTION WITH DEEP LEARNING: A FOCUS ON ANN-BASED CLASSIFICATION <i>Authors: Hanane Hadiki, Fouad Slaoui Hasnaoui Georges Semaan</i>

SESSION 10	Renewable Energy Friday 28, June 2024 10h00-12h00 (#G2)
CHAIRS	SAIDI HASSANI ALAOUI MOHAMED, ABDELMALEK ESSAADI UNIVERSITY EL ABBASSI AHMED, MOULAY ISMAIL UNIVERSITY
Meet Link	https://meet.google.com/feh-thty-mih
96	DESIGNING AN ORGANIC SOLAR CELL BASED ON ORGANIC POLYMERS DONOR AND PC71BM ACCEPTOR: A DFT STUDY <i>Author: Soufiane ELHADFI</i>
102	THE IMPORTANCE OF THE ACTIVE COMPONENT IN OPTIMIZING ELECTRICAL CONSUMPTION IN RESIDENTIAL AND TERTIARY BUILDINGS <i>Author: Hiba BOURADOUIA, Abdelhadi El moudden</i>
121	VALIDATED TRNSYS MODEL FOR AN INDIRECT SOLAR WATER HEATER WITH FORCED CIRCULATION IN VARIOUS WEATHER <i>Author: ASMAA ZOUITINE</i>
169	THE ELECTION-BASED OPTIMIZATION ALGORITHM FOR PHOTOVOLTAIC MODELS PARAMETERS ESTIMATION <i>Author: Souad Lidaighbi</i>
172	IMPROVED EFFICIENCY OF CZTS-BASED SOLAR CELLS <i>Author: taoufik chargui, fatima Imai, khalid rahmani</i>
187	STRATEGIES DEPLOYED IN THE FACE OF THE TECHNICAL CHALLENGES OF INTEGRATING RENEWABLE ENERGY SOURCES INTO SMART GRIDS: A REVIEW <i>Author: mariyam ouhmidan, TOURIA HAIDI, AZIZ BELFQIH</i>

SESSION 11	Telecommunication and signal processing Friday 28, June 2024 15h30-17h30
CHAIRS	MOHAMMED FATTAH, MOULAY ISMAIL UNIVERSITY ABDELHAFID ES-SAQY, SIDI MOHAMED BEN ABDELLAH UNIVERSITY MOHAMMED BENDAOUED, HASSAN FIRST UNIVERSITY
Meet Link	https://meet.google.com/cqf-dcpf-fbz
189	CONTRASTIVE SELF-SUPERVISED LEARNING IN MEDICAL SIGNAL PROCESSING: LITERATURE REVIEW AND CASE STUDY <i>Authors: Zakaria ALOUANI, Othmane DAANOUNI, Shawki SALEH, Hicham MOUJAHID, Bouchaib CHERRADI, Omar BOUATTANE</i>
145	ACOUSTIC WAVE TRANSMISSION TUNING IN A ONE-DIMENSIONAL SYSTEM USING TWO PARALLELEPIPED COPPER LOCAL RESONATORS <i>Authors: Moulay Said Khattab, Tarik Touiss, Ilyass El Kadmiri, and Driss Bria</i>
256	THEORETICAL STUDY OF ELECTROMAGNETIC WAVE PROPAGATION IN DIELECTRIC CYLINDRICAL WAVEGUIDES <i>Authors: Tarik TOUISS, Mohammed Rida QASEM, Siham MACHICHI, Farid FALYOUNI, and Driss BRIA</i>
410	AN OVERVIEW OF TECHNIQUES FOR ENHANCING ENERGY EFFICIENCY IN 5G NETWORKS <i>Author: Joseph Kwabena Fosu Okyere</i>

132	ACOUSTIC SWITCH DEVICE FOR A SPLITTER ACOUSTIC WAVE MADE BY WAVEGUIDES AND RESONATOR <i>Authors: Ilham El-Atmani, Ilyass El Kadmiri, Driss Bria, Aissam Khaled, Mounsif Ech cherif El kettani, Pierre Marechal</i>
34	A MMIC PHASE SHIFTER LINE WITH FOUR-PHASE QUADRATURE OUTPUTS FOR 5G APPLICATIONS <i>Authors: Abdelhafid Es-Saay , Maryam Abata, Salah-Eddine Didi, Mohammed Fattah, Said Mazer, Mahmoud Mehdi, Moulhime El Bekkali, and Catherine Algani</i>

SESSION 12	Antennas and propagation II Friday 28, June 2024 15h30-17h30
CHAIRS	ALI EL ALAMI, MOULAY ISMAIL UNIVERSITY BOU-EL-HARMEL, SIDI MOHAMED BEN ABDELLAH UNIVERSITY
Meet Link	https://meet.google.com/tih-trza-wiy
273	High-Performance Directional Printed Antenna Array for 5G Applications at 28 GHz <i>Authors: Salah-Eddine DIDI, Imane HALKHAMS, Abdelhafid ES-SAQY , Mohammed FATTAH, Said MAZER, Moulhime EL BEKKALI</i>
119	Ultra-Wide Band Microstrip patch antenna for Microwave Imaging <i>Authors: Redouan AOULAD OMAR , Saad CHAKKOR, Aziz DKIOUAK , Mostafafa BAGHOURI</i>
138	Design of a compact Microstrip Bandpass Filter for 2.4 GHz Applications <i>Authors: KHARDIOUI Youssef, EL ALAMI ALI, EL GHZAOUI Mohammed</i>
369	Design of a compact dual-band passband filter designed for wireless communication systems. <i>Authors: Kaoutar EL BAKKAR, Mohammed EL GHZAOUI, Ali EL ALAMI</i>
432	Design of an Electrically Small and Quasi-Isotropic 3D Antenna for Internet of Things (IoT) Applications <i>Authors: Abdelhamid BOU-EL-HARMEL, Jamel BELBADID, Ali BENBASSOU</i>
302	A novel 2x1 UWB-MIMO flower bouquet shaped antenna using CSRR reducing mutual coupling for wireless communication systems <i>Authors: Naima Dihaji, Hanane Nasraoui, Sudipta Das, Jamal El Aoufi, Mustapha Kchikach</i>

SESSION 13	Control Friday 28, June 2024 15h30-17h30
CHAIRS	ABDELGHANI EL OUGLI, SIDI MOHAMED BEN ABDELLAH UNIVERSITY AZIZ DEROUICH, SIDI MOHAMED BEN ABDELLAH UNIVERSITY
Meet Link	https://meet.google.com/iim-afbs-zvb
476	Control of asynchronous machines by flux regulation <i>Authors: Hamza Kamel, Fatima Id Ouissaaden , Soufiane El Khaldi, Said Dlimi , Fahd Elmourabit, Mohssin Aoutoul, Mohammed Khalis, Samir Elouaham, Abdelaziz Khoukh</i>
451	Vehicle Dynamics: Comparative Study of Mathematical Models <i>Authors: SOUNDOUSS Halima, MSAAF Mohammed, BELMAJDOUB Fouad</i>

400	<p>Integration of ECMS Control Strategies Using Q-Learning Algorithm in Hybrid Electric Vehicles</p> <p><i>Authors: Idriss Mortabit, Aziz RACHID, Soulaïman Laaroussi, MOHAMED AMINE TAHIRI, Bilal Boudmane</i></p>
401	<p>Toward Cooperative Adaptive Cruise Control: A Mini-review</p> <p><i>Authors: MOHAMED AMINE TAHIRI, Aziz RACHID, Bilal BOUDMANE, Idriss Mortabit, Soulaïman Laaroussi</i></p>
364	<p>Sliding mode control of an isolated DC-DC full bridge power converter for fuel cell applications</p> <p><i>Authors: Seddik Khamlichi, Aziz Rachid, Elhoussaine Saidi, Hicham Bella, Idriss Mortabit, Nidale Errifai, Kamal Rachid, Abdellah Lassioui</i></p>
53	<p>“Deep Learning-Based Plant Disease Classification Using EfficientNetV2B3: Performance Evaluation and Model Optimization”</p> <p><i>Authors: KHAOULA TAJI, FADOUA GHANIMI</i></p>

SESSION 14	<p>Renewable energy II Friday 28, June 2024 15h30-17h30</p>
CHAIRS	<p>HARI SHANKAR BISWAS, SURENDRANATH COLLEGE, KOLKATA LAILA OUZZANI CHAHIDI, SIDI MOHAMED BEN ABDELLAH UNIVERSITY RACHID MASROUR, SIDI MOHAMED BEN ABDELLAH UNIVERSITY</p>
Meet Link	<p>https://meet.google.com/nsn-vnng-zfj</p>
268	<p>EFFECT OF PARTIAL SHADING ON A PV SYSTEM</p> <p><i>Authors: Fatima Id Ouissaaden, Said Dlimi, Hamza Kamel, Soufiane El Khaldi, Fahd Elmourabit, Abdelaziz Khoukh</i></p>
258	<p>OPTIMAL SITE SELECTION FOR SOLAR PV FARMS IN NORTHERN MOROCCO USING THE AHP APPROACH AND GIS TOOLS</p> <p><i>Authors: Mohammed Charchaoui</i></p>
59	<p>SCAPS-1D SIMULATION OF SINGLE-WALLED CARBON NANOTUBE (SWCNT) BASED SOLAR CELLS</p> <p><i>Authors: Kaoutar Ridani, Abdelmajid El Khalfi, Mohamed Hamdaoui, Ilham Rais, Abdellah Benami, Najim Mansour, Abderrahman El Boukili, Ismail Naciri, Lahoucine Elmaimouni</i></p>
155	<p>ACCURATE SHORT-TERM SOLAR IRRADIANCE FORECASTING WITH TINYML ON EDGE DEVICES</p> <p><i>Authors: Naima EL-AMARTY, Hakim El Fadili, Saad Dosse Bennani</i></p>
250	<p>RULE-BASED ENERGY MANAGEMENT STRATEGY FOR GRID-CONNECTED MULTI-MICROGRID SYSTEM BASED ON DISTRIBUTED POWER EXCHANGE</p> <p><i>Authors: Nurul Nadia Ibrahim, Jasrul Jamani Jamian, Madihah Md Rasid</i></p>
292	<p>CHARACTERIZING PARAMETERS IN SINGLE-DIODE AND DOUBLE-DIODE PHOTOVOLTAIC MODELS USING A NOVEL BIO-INSPIRED APPROACH</p> <p><i>Authors: Abdelfattah Elhammoudy</i></p>

SESSION 15	Material Sciences
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Friday 28, June 2024 15h30-17h30 (#G2)	
CHAIRS	LAMIAE TALHA, SIDI MOHAMED BEN ABDELLAH UNIVERSITY, MOROCCO LAMIAE MRHARRAB, SIDI MOHAMED BEN ABDELLAH UNIVERSITY, MOROCCO HAMANE LEMZIOUKA, SIDI MOHAMED BEN ABDELLAH UNIVERSITY, MOROCCO
Meet Link	https://meet.google.com/ssa-nxqi-oxu
103	EFFECT OF RARE EARTH DOPING ON THE MICROSTRUCTURE AND TOTAL CONDUCTIVITY OF PEROVSKITE LI0.5LA0.5TIO3 SOLID ELECTROLYTE <i>Authors: Abdelhak CHOUIEKH, Nour el hoda Bouftila, Lahcen BIH</i>
105	EXPERIMENTAL AND DFT ANALYSIS OF STRUCTURAL AND OPTICAL PROPERTIES OF CERIUM DOPED BATIO3 CERAMICS <i>Authors: ALI DIDI SEDDIK, Abdelhak CHOUIEKH, adil moutaouaffiq</i>
115	EVALUATING THE EFFECTIVENESS OF PHASE CHANGE MATERIALS DURING POWER OUTAGE AND DEFROSTING CYCLES FOR A COLD ROOM STORAGE <i>Authors: Zakaria OUAOUJA, Cyril TOUBLANC, Michel HAVET</i>
137	CALCULATION OF EXCHANGE PARAMETERS IN DOUBLE PEROVSKITE SR2CUOSO6 USING MONTE CARLO SIMULATION <i>Authors: Hajar EL GANICH, Omar Ben Lenda, Omar El Rhazouani</i>
143	L'ÉTUDES STRUCTURALES, MORPHOLOGIQUES ET OPTIQUES DES NANO-CÉRAMIQUES BATI1-XFEXO3-Δ <i>Author: Driss Akhlidej, Abdelhalim Elbasset, Farid Abdi, Taj-dine Lamcharfi, Nor-Said Echatoui, Lhaj El Hachemi Omari, Abdelmounaim Hmamou, Mohammed El Gh., Lamiae Mrharrab</i>
144	L'EFFET DE DOPAGE PAR (FE2+) SUR LES PROPRIETE STRUCTURALES, MORPHOLOGIES, DIELECTRIQUES DES TITANATE BARYUM (BATIO3) <i>Author: Driss Akhlidej, Abdelhalim Elbasset, Farid Abdi, Taj-dine Lamcharfi, Lhaj El Hachemi Omari, Abdelmounaim Hmamou, Mohammed El Gh., Asmaa Zouitine, Lamiae Mrharrab</i>

SESSION 16	Convolutional Neural Networks Friday 28, June 2024 15h30-17h30
CHAIRS	MOHAMED TAJ BENNANI, SIDI MOHAMED BEN ABDELLAH UNIVERSITY HAMID TAIRI, SIDI MOHAMED BEN ABDELLAH UNIVERSITY
Meet Link	https://meet.google.com/pto-ittf-ohr
64	NEURAL NETWORK FOR FCEVS AND RM POWER MANAGEMENT USING V2G TECHNOLOGY <i>Authors: Ismail Elabbassi, Mohamed Khala, Naima El yanboiy, Omar Eloutassi, Youssef El hassouani</i>
244	IMPROVING ALZHEIMER'S DISEASE PREDICTION THROUGH CONVOLUTIONAL NEURAL NETWORKS <i>Authors: Mohamed Amine Mahjoubi, Driss Lamrani, Mohammed Amine Bouqentar, Soufiane Hamida, Bouchaib Cherradi, Abdelhadi Raihani</i>

281	<p>A MIX OF WAVELET TRANSFORMS AND CNN FOR LEFT VENTRICULAR EJECTION FRACTION ESTIMATION</p> <p><i>Authors: Mouad Ergouyeg, Redouan Korchiyne, Abderrahmane Laraoui, Yasmin Derraz, Hicham Cherrab, Meriem Id-Laasri, Zakaria Benzyane, Meriem Sbai, Zineb Squalli El Houssaini</i></p>
404	<p>AN ADAPTIVE LEARNING ELDERLY FALL DETECTION SYSTEM USING LSTM AND CONVOLUTIONAL NEURAL NETWORK</p> <p><i>Authors: Nevin Vunka Jungum</i></p>
412	<p>SEG_URESNET: A DEEP HYBRID CONVOLUTIONAL NEURAL NETWORK OF ROAD SCENES FOR SEMANTIC SEGMENTATION</p> <p><i>Authors: Zahra FASKA, Lahbib KHRISSI, Khalid HADDOUCH, Nabil EL AKKAD</i></p>
366	<p>A SURVEY ON RGB IMAGES CLASSIFICATION USING CONVOLUTIONAL NEURAL NETWORK (CNN) ARCHITECTURES: APPLICATIONS AND CHALLENGES</p> <p><i>Authors: El kharrachi KHAYYA, Ahmed El oirrak, Toufik Datsi</i></p>
332	<p>DEVELOPMENT OF A STOCHASTIC MODEL OF RBF NEURAL NETWORK FOR FORECASTING RELATIVE HUMIDITY RATES</p> <p><i>Authors: Abdellah BEN YAHIA, Abdelaziz ABDALLAOUI, Iman KADIR</i></p>

SESSION 17	<p>IoT applications Friday 28, June 2024 15h30-17h30</p>
CHAIRS	<p>MOHAMED BACHAR, HASSAN II UNIVERSITY IMANE HALKHAMS, SIDI MOHAMED BEN ABDELLAH UNIVERSITY JAMAL RIFFI, SIDI MOHAMED BEN ABDELLAH UNIVERSITY</p>
Meet Link	<p>https://meet.google.com/esz-bncp-fek</p>
23	<p>ENHANCING IOT WORKLOADS: A COMPARATIVE STUDY OF FOG AND EDGE COMPUTING SCHEDULING ALGORITHMS</p> <p><i>Authors: Mohammed Fattah</i></p>
417	<p>IOT CONNECTIVITY FOR ENHANCING HYDROPONIC FARMING: A COMPARATIVE STUDY</p> <p><i>Authors: Mohamed Doubiz, Mouad Banane, Abdelali Zakrani, Allae Erraissi</i></p>
307	<p>SAFEGUARDING THE FUTURE : EXPLORING STATE-OF-THE-ART TECHNIQUES IN SECURING IOMT SYSTEMS</p> <p><i>Authors: Ghita Lazrek, Kaouthar Chetioui, Younes Balboul</i></p>
376	<p>EMPOWERING FUTURE HEALTHCARE PROFESSIONALS: ENHANCING MEDICAL EDUCATION THROUGH THE INTEGRATION OF ARTIFICIAL INTELLIGENCE</p> <p><i>Authors: BERRAMI HIND, Amal BARKOUK, Nouha BELAYACHI, Manar JALLAL, Zineb SERHIER, Mohammed BENNANI OTHMANI</i></p>
360	<p>PRIVACY-PRESERVING ANOMALY DETECTION FOR IOT: LEVERAGING FEDERATED AND SPLIT LEARNING</p> <p><i>Authors: Arjdal Rguibi, Asimi Younes, Asimi Ahmed, Lahcen Oumouss</i></p>
318	<p>DEEP LEARNING FOR ENHANCED IOMT SECURITY: A GNN-BILSTM INTRUSION DETECTION SYSTEM</p> <p><i>Authors: Yahya RBAH, Mohammed MAHFOUDI, Mohammed Fattah, Younes BALBOUL, Said MAZER, Moulhime ELBEKKALI, Benaissa BERNOUSSI</i></p>

SESSION 18	Data Sciences II Friday 28, June 2024 15h30-17h30
CHAIRS	NABIL ELAKKAD, SIDI MOHAMED BEN ABDELLAH UNIVERSITY MY ABDELOUAHED SABRI, SIDI MOHAMED BEN ABDELLAH UNIVERSITY SAID ECH-CHADI, CADI AYYAD UNIVERSITY
Meet Link	https://meet.google.com/nfx-yzpt-nhc
118	FIREFIGHTER INTERVENTION PREDICTIVE MODELING: RELIABILITY ASSESSMENT <i>Authors: SIRRI Naoufal, Christophe Guyeux</i>
139	ANALYZING THE QUALITY OF WEB-BASED SCHOLARSHIP INFORMATION SYSTEM USING ISO/IEC 25010 STANDARD <i>Authors: Fadilah Nurunnisa, Muhammad Luthfi Hamzah, Angraini, Eki Saputra</i>
257	ANALYZING USER SATISFACTION WITH THE DANA E-WALLET USING THE E-SERVICE QUALITY, CSI, AND KANO METHODS <i>Authors: Muthia Kamila</i>
338	INTEGRATION OF PARABOLIC TROUGH CONCENTRATOR WITH ORGANIC RANKINE CYCLE FOR ENHANCED DESALINATION REVERSE OSMOSIS MANAGEMENT <i>Authors: Soufyane Naaim, Badr Ouhammou, Brahim Daouchi, Mohammed Aggour</i>
394	EVALUATION OF USER EXPERIENCE IN MOBILE APPLICATIONS USING USER EXPERIENCE QUESTIONNAIRE AND USER-CENTERED DESIGN METHODS <i>Authors: ariq hendrian, Ahmed Belkhadim, Abderrahim Maizate, Abdelaziz Ettaoufik, Zouhair Ibn Batouta</i>
47	ANALYZING SMART PARKING SYSTEM: WSN TECHNOLOGIES, POWER SAVING AND GUIDANCE <i>Authors: Hind kadim alaoui, Moussa Coulibaly, Ahmed Errami</i>

SESSION 19	Embedded systems, IoT and AI Friday 28, June 2024 15h30-17h30
CHAIRS	RITAM DUTTA, POORNIMA INSTITUTE OF ENGINEERING & TECHNOLOGY BOUKILI BENSALAM, SIDI MOHAMED BEN ABDELLAH UNIVERSITY NOREDDINE CHAIBI, SIDI MOHAMED BEN ABDELLAH UNIVERSITY
Meet Link	https://meet.google.com/joc-dkmi-rvo
170	64 BIT HIGH SPEED COUNTER WITH GALOIS LFSR <i>Authors: B.Rohith, A.Sunil kumar, S.Deepak Ramesh, K.Jamal, M.Kiran, M.Suneetha</i>
395	SECURING TEST INFRASTRUCTURE AGAINST TEST BASED SIDE CHANNEL ATTACKS <i>Authors: Kalakota Kiran Reddy, Nagarjun Gowda S, Gautham G Mulay, Hrithik L Jain, Rekha S S, K Sudeendra Kumar</i>
454	IMPROVED REAL TIME PRINTED CIRCUIT BOARD FAULT DETECTION <i>Authors: Abdelhak Mehadjbia, Fouad Slaoui Hasnaoui</i>

405	MEMRISTOR-BASED EFFICIENT COMBINATIONAL CIRCUIT DESIGNS USING MATERIAL IMPLICATION <i>Authors: Sourav Mukherjee</i>
73	EXPLORE OPEN SOURCE HARDWARE SOLUTIONS FOR IOT APPLICATIONS <i>Authors: Oussama EL ALLAM, Abdelhakim ALAL, Mohamed SADIK, Hasna ELMAARADI</i>
377	A HARDWARE IMPLEMENTATION OF DICE ON A RISC-V PROCESSOR <i>Authors: Vaibhavi Naik, Tushar Masur, Spandana K, Wrileena Sanyal, Sudeendra Kumar</i>
230	INTERPRETABLE DEEP LEARNING FOR DDOS DEFENSE: A SHAP-BASED APPROACH IN CLOUD COMPUTING <i>Authors: Mohamed OUHSSINI, Elhafed AGHERRABI, Karim AFDEL, Mohamed AKOUHAR and Abdallah ABARDA</i>

SESSION 20	Data Sciences and IoT Saturday 29, June 2024 9h30-11h30 (#G2)
CHAIRS	SOUAD TOUAIRI, UNIVERSITY SULTAN MOULAY SLIMANE MOHAMMED BENBRAHIM, SIDI MOHAMED BEN ABDELLAH UNIVERSITY
Meet Link	https://meet.google.com/cho-ztkb-vma
72	LEVERAGING RESIDUES FROM TRADITIONAL MOROCCAN POTTERY: FORMULATING ECO-FRIENDLY BRICKS WITH INDIGENOUS CLAY FOR ENERGY AND MATERIAL EFFICIENCY <i>Author: Said BAJJI, Ahmed SABA, Youssef Naimi</i>
75	UNVEILING THE NEXUS: DAYTIME SLEEPINESS AND SMARTPHONE USAGE AMONG HIGH SCHOOL STUDENTS IN MARRAKECH <i>Author: Sana Sadiq</i>
83	ENHANCING MEDICAL IMAGE SECURITY IN IOMT ENVIRONMENT WITH A LIGHTWEIGHT CRYPTO-COMPRESSION APPROACH USING ECC MECHANISM AND WAVELET TRANSFORM <i>Author: Khadija EL KINANI</i>
113	DEVELOPMENT AND COMPARISON OF STOCHASTIC NEURAL MODELS: APPLICATION TO METEOROLOGY DATA. <i>Author: iman kadir, Abdellah BEN YAHIA, Abdelaziz ABDALLAOUI</i>
141	IOT, 6G, IPFS AND BLOCKCHAIN : INTEGRATION, CHALLENGES, AND FUTURE TRENDS <i>Author: Soufian El airaj</i>
148	OPTIMIZATION OF MICROSERVICES DEPLOYMENT IN CLOUD ENVIRONMENTS A MULTI-OBJECTIVE APPROACH <i>Author: EL Horri Ghizlane, Mostapha Zbakh</i>
114	HYBRID SIMULATION METHOD FOR DYNAMIC HARVESTING SYSTEMS <i>Authors: Meriem Samy (USMS-FST), Maryam LAHIB (USMS-FST), Souad Touairi (Usms-FST), Mustapha MABROUKI</i>

SESSION 21	Data Sciences III Saturday 29, June 2024 9h30-11h30
CHAIRS	EL HASSAN EL-HASSOUNY, HIGHER INSTITUTE OF NURSING AND HEALTH TECHNOLOGY PROFESSIONS SAID EL GAROUANI, SIDI MOHAMED BEN ABDELLAH UNIVERSITY
Meet Link	https://meet.google.com/rqc-wpvn-nuq
140	IMPROVED STORAGE OF BIG DATA IN DNA USING THE PCA ALGORITHM <i>Authors: En-Nattouh Youssef, Reda Jourani</i>
74	SHAPING THE PERCEPTION OF ARTIFICIAL INTELLIGENCE: A STUDY ON THE REPRESENTATION OF AI AMONG YOUNG INDIVIDUALS. <i>Authors: Vandapuye Sophia , Jabraoui Siham</i>
265	UNVEILING THE LANDSCAPE OF NETWORK ARCHITECTURES: A DEEP DIVE AND MULTI-CRITERIA ANALYSIS OF SDN AND TRADITIONAL NETWORKS <i>Authors: Ahmed BELKHADIM, Abderrahim Maizate, Abdelaziz Eттаoufik, Zouhair Ibn Batouta</i>
176	A NOVEL CRYPROSYSTEM BASED ON AN ENHANCED VIGENERE ALGORITHM SUCCEEDED BY A RANDOMIZED PARTIAL PERMUTATION <i>Authors: Hamid El Bourakkadi, Abdelhakim Chemlal, Hassan Tabti, Abdellah Abid, Abdellatif Jarjar, Abdelhamid Benazzi</i>
151 (#G2)	ENHANCED LITHIUM-ION TRANSPORT IN NASICON COMPOUNDS THROUGH MII-MIII SUBSTITUTION: STRUCTURAL, MICROSTRUCTURAL, AND IMPEDANCE ANALYSIS <i>Authors: Nour El Hoda Bouftila, Abdelhak Chouiekh, Aurelian Catalin Galca, Roxana Elena Patru, Lucia Nicoleta Leonat, Yahya Ababou, Mohamed Naji</i>

SESESSION 22	Image processing Saturday 29, June 2024 9h30-11h30
CHAIRS	GEORGE A. PAPAKOSTAS, DEMOCRITUS UNIVERSITY OF THRACE JAMAL BELKDID, SIDI MOHAMED BEN ABDELLAH UNIVERSITY EL HABIB NFAOUI, SIDI MOHAMED BEN ABDELLAH UNIVERSITY
Meet Link	https://meet.google.com/pfm-tcui-dni
272	IMAGE CONFIDENTIALITY THROUGH 1D CHAOTIC MAP INTEGRATION AND SHIFT OPERATION <i>Authors: Safae Amine, Fatima Koulouh, Mohammed Es-Sabry, Nabil El Akkad</i>
274	DEEP LEARNING-BASED SOLUTION FOR 3D RECONSTRUCTION FROM SINGLE RGB IMAGES <i>Authors: Maryem BELKAID, El Arbi Abdellaoui Alaoui, Achraf BERRAJAA, Nabil El Akkad, and Mostafa MERRAS</i>

288	NEW CYPHER COLOR IMAGE AALGORITHM USING AN ADVANCED VIGENERE METHOD AND GENETIC CROSSOVER <i>Authors: Hassan Tabti, Hamid El Bourakkadi, Abdelhakim Chemlal, Abdellatif Jarjar, Said Najah and Khalid Zenkour</i>
397	EVALUATING IMAGE SEGMENTATION ALGORITHMS: MEAN SHIFT, K-MEANS, AND MULTI-OTSU ON BSDS500 WITH HUMAN-ANNOTATED REFERENCE <i>Authors: Oussama El Haouari, Nabil El Akkad, Lahbib Khriissi and Mouarad Hana</i>
175	IMAGE ENCRYPTION THROUGH TWO ROUNDS OF FEISTEL OPERATING AT THE BIT LEVEL <i>Authors: Abdelhakim Chemlal, Hamid El Bourakkadi, Hassan Tabti, Mariem Jarjar, Abdellatif Jarjar, and Abdelhamid Benazzi</i>
229	VISUALIZATION OF INDONESIAN SIGN LANGUAGE SYSTEM USING IMAGE CLASSIFICATION FOR SPECIAL NEEDS STUDENTS IN SPECIAL SCHOOLS <i>Authors: Naufal Safiq Tama, Rice Novita</i>

SESSION 23	Healthcare sector Saturday 29, June 2024 9h30-11h30
CHAIRS	ZINEB SQALLI HOUSSAINI, SIDI MOHAMED BEN ABDELLAH UNIVERSITY SUDIPTA DAS, IMPS COLLEGE OF ENGINEERING & TECHNOLOGY
Meet Link	https://meet.google.com/pwt-qyjp-cjk
217	UNDERSTANDING PATIENT PERSPECTIVES ON MHEALTH ADOPTION IN MOROCCO: WILLINGNESS, INTEREST, AND REASONS <i>Authors: Zineb Boubekri, Adelin Niyonsaba, Fatima Zahra Mouzoun, Manar Jallal, Zineb Serhier, Mohammed Bennani Othmani</i>
40	A COMPREHENSIVE SURVEY ON DEEP LEARNING APPROACHES FOR SAFEGUARDING THE INTERNET OF MEDICAL THINGS FROM MALICIOUS INTRUSIONS <i>Authors: YAHYA RBAH</i>
42	ANALYZING THE EVOLUTION OF ARTIFICIAL INTELLIGENCE (AI) IN SUPPLY CHAIN MANAGEMENT: A BIBLIOMETRIC REVIEW <i>Authors: Ouissale EL gharbaoui</i>
150	SECURING HEALTHCARE IOMT COMMUNICATIONS: A CONFIDENTIALITY APPROACH THROUGH KEY GENERATION AND STEGANOGRAPHY <i>Authors: Youssef NOUR-EL AINE, Cherkaoui LEGHRIS</i>
293	EVALUATING THE RELIABILITY OF ARTIFICIAL INTELLIGENCE IN HEALTHCARE: THE DOCTORS' PERSPECTIVE IN NORTHERN GREECE <i>Authors: Eleni Givanoudi, Eleni Vrochidou, George A. Papakostas</i>
359	AN INTERFACE DEVELOPMENT BASED ON IOT APPROACH FOR SMART PREDICTIVE MAINTENANCE IMPLEMENTATION: CASE OF DIESEL ENGINE <i>Authors: Mounir EL KHIATE</i>

SESSION 24	Machine learning application Saturday 29, June 2024 9h30-11h30
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CHAIRS	SEEMANT TIWARI, SOUTHERN TAIWAN UNIVERSITY OF SCIENCE AND TECHNOLOGY KHALID EL FAZAZI, SIDI MOHAMED BEN ABDELLAH UNIVERSITY ABDELHALIM ELBASSET, SIDI MOHAMED BEN ABDELLAH UNIVERSITY
Meet Link	https://meet.google.com/zgk-mubr-omk
100	MACHINE LEARNING IN FETAL HEALTH: IMPROVING ECG ANALYSIS WITH RANDOM FOREST <i>Authors: Mohammed MOUTAIB, Mohammed FATTAH, Yousef FARHAOUI, Badraddine AGHOUTANE</i>
183	ADVANCING LINK PREDICTION IN DIRECTED SOCIAL NETWORKS: A MACHINE LEARNING APPROACH <i>Authors: Badiy Mohamed, Amounas Fatima, and El airaj Soufian</i>
260	PALM OIL PRODUCTION PREDICTION USING SUPPORT VECTOR REGRESSION ALGORITHM AND LONG SHORT-TERM MEMORY <i>Authors: Delvi Hastari, Mustakim, Rice Novita, M. Afdal</i>
431	METAL STRUCTURAL DEFECT DETECTION BASED-ON DEEP LEARNING AND GRAD-CAM <i>Authors: Abdelhak Mehadjbia</i>
243	DEEP LEARNING-BASED TOOLS FOR CONTACT TRACING IN CASES OF VIRAL INFECTIONS <i>Authors: Lhiadi Redouane, Jaddar Abdessamad, Kaaouachi Abdelali</i>
406	IMPROVING ALEXA'S RESPONSE WITH SENTIMENT ANALYSIS AND COMPARING VARIOUS MACHINE LEARNING MODELS <i>Authors: Dipankar Roy, Aparna Bhaduri, Kalyan Maji, Mithu Mal, Joyjit Patra, Subir Gupta</i>

SESSION 25	Emergent technologies Saturday 29, June 2024 9h30-11h30
CHAIRS	CHARQI MOHAMMED, SIDI MOHAMED BEN ABDELLAH UNIVERSITY MADHAV, B. T.P., K L DEEMED TO BE UNIVERSITY ABDELAALI RAHMOUNI, SIDI MOHAMED BEN ABDELLAH UNIVERSITY
Meet Link	https://meet.google.com/bnq-yjcz-mez
188 (#G2)	CONTROL STRATEGIES FOR SUSTAINABLE BUILDING ENERGY MANAGEMENT: A REVIEW <i>Author: Habiba MAHROUCH, TOURIA HAIDI, Mounir DERRI</i>
193 (#G2)	COMPARATIVE STUDY OF EQUIVALENT CIRCUIT MODELS PERFORMANCE OF LITHIUM-ION BATTERIE: RINT MODEL, THEVENIN MODEL, PNGP MODEL, GNL MODEL. <i>Author: Itto EL-KABASSI, Abdelaziz Hjjouji, Adil BROURI</i>
365 (#G2)	STUDY OF THE INHIBITION OF THE CORROSION OF A MILD STEEL IN A 1M HCL MEDIUM BY AN ORGANIC MOLECULE SYNTHESIZED WITH A PYRIMIDINE BASE <i>Author: KHOUYA NAWFAL</i>
409 (#G2)	EXPLORING THE EFFECTS OF AN INNOVATIVE ACTIVE LEARNING METHODOLOGY <i>Author: Issam Habibi, Abdelrhani Elachqar, El Hassan El-Hassouny, Fatiha Kaddari</i>
136 (#G2)	DESIGN OF 28 GHz HIGH GAIN 5G MIMO ANTENNA ARRAY SYSTEM <i>Author: ibrahim khouyaoui</i>

149	WIRELESS CONTROL OF A D.C. MOTOR USED FOR DRIVING A CONVEYOR BELT <i>Author: Petru Livinti, Ioan-Viorel Banu, George Culea, Bouderbala Manale, Btissam Majout, Alexandru Dusa</i>
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SESSION 26	Blockchain Saturday 29, June 2024 9h30-11h30
CHAIRS	NABIL NISSAR, NATIONAL INSTITUTE OF POSTS AND TELECOMMUNICATIONS RABAT GHAIDA MUTTASHAR ABDULSAHIB, UNIVERSITY OF TECHNOLOGY OF BAGHDAD OSAMAH IBRAHIM KHALAF, AL-NAHRAIN UNIVERSITY
Meet Link	https://meet.google.com/iaa-yqyz-jud
287	BLOCKCHAIN TECHNOLOGY MODEL FOR BUILDING SME BUSINESS SUSTAINABILITY THROUGH SME COLLABORATION <i>Authors: Inayatulloh, Adele Mailangkay, Holly Deviarti, Gunawan Wang, Indra Kusumadi Hartono, Muhammad Zarlis</i>
277	INTEGRATING BOND GRAPHS AND BAYESIAN NETWORKS: A NOVEL DECISION MODEL FOR BIDDERS IN PUBLIC PROCUREMENT <i>Authors: Amina Oussaleh Taoufik, Abdellah Azmani</i>
317	OPTIMIZING SPECIMEN GEOMETRY FOR IMPROVED SPLITTING TENSILE TEST PERFORMANCE: A NUMERICAL INVESTIGATION <i>Authors: Hajar Sadeq, Abdelkader Nasser, Abdelhamid Kerkour El Miad, Najib Amar</i>
334	NOTARIZER - A NEW APPROACH TO PERFORM NOTARIZATION THROUGH BLOCKCHAIN <i>Authors: Abdu Rehaman Pasha Syed</i>
361	BLOCKCHAIN: PILLAR OF REVOLUTIONS IN CRYPTOCURRENCIES, SUPPLY CHAIN MANAGEMENT, INTERNET OF THINGS AND HEALTHCARE <i>Authors: El Mehdi Steli, Abdessamad Ouchen</i>
254 (#G2)	EFFICIENT RFID AUTHENTICATION SCHEME WITH ECC INTEGRATION FOR FORTIFIED IOT SECURITY <i>Author: hind Timouhin, Fatima Amounas, Mohamed Badiy</i>

SESSION 27	Artificial neural network, data science and detection Saturday 29, June 2024 9h30-11h30 (#G2)
CHAIRS	RACHID EL ALAMI, SIDI MOHAMED BEN ABDELLAH UNIVERSITY QJIDAA HASSAN, SIDI MOHAMED BEN ABDELLAH UNIVERSITY MOUNIR OUREMCHI, SIDI MOHAMED BEN ABDELLAH UNIVERSITY
Meet Link	https://meet.google.com/rgg-hncj-czt
267	IMPLEMENTATION OF CONVOLUTIONAL NEURAL NETWORKS (CNNs) ON FPGA BOARD FOR ADVANCED PHYSICAL SECURITY OF DOORS <i>Author: Bouchra KOUACH, Mohcin Mekhfioui, Rachid El Gouri</i>

95	PREDICTING SLOPE STABILITY IN AN OPEN-CAST MINING OPERATION: AN ARTIFICIAL NEURAL NETWORK APPROACH <i>Author: Redouane OUBAH, Latifa OUADIF, Youssef ZERRADI</i>
109	TOWARD A NOVEL IDS APPROACH BASED ON PARAGRAPH VECTOR-DISTRIBUTED MEMORY <i>Author: EL ASRY CHADIA</i>
157	A MODIFIED PITZER MODEL FOR AQUEOUS SOLUTION AND OPTIMIZATION THE PARAMETERS <i>Author: Radouane CHATIT, Hamid ELMAAZOUZI, Brahim MESSNAOUI, Abdessamad TOUNSI</i>
325	MODELLING THE IMPACT OF FORECASTING PROCESSES IN THE SUPPLY CHAIN ON COMPANY PERFORMANCE: THE CASE OF MOROCCAN COMPANIES <i>Author: Latifa KHOUZ</i>
331	MODELING OF CORROSION AND HER INFLUENCE ON BOND STRENGTH IN REINFORCED CONCRETE STRUCTURES <i>Author: fatima el mennaouy</i>

SESSION 28	Detection and Artificial Intelligence Techniques Machine learning application Saturday 29, June 2024 9h30-11h30
CHAIRS	AMAR BAKDID, MOHAMED PREMIER UNIVERSITY OF OUJDA RADOUANE ELBAHJAOUI, SIDI MOHAMED BEN ABDELLAH UNIVERSITY RODOUANE TOUTI, SIDI MOHAMED BEN ABDELLAH UNIVERSITY
Meet Link	https://meet.google.com/cbu-vapr-ouw
223	ENHANCING ARABIC TEXT READABILITY ASSESSMENT: A COMBINED BERT AND BILSTM APPROACH <i>Authors: Mohamed Amine Ouassil, Mohammed Jebbari, Rabia Rachidi, Mouaad Errami, Bouchaib Cherradi, Abdelhadi Raihani</i>
225	SPAM DETECTION IN ARABIC TWEETS USING ARTIFICIAL INTELLIGENCE TECHNIQUES <i>Authors: Mouaad Errami, Mohamed Amine Ouassil, Rabia Rachidi, Mohammed Jebbari, Bouchaib Cherradi, Abdelhadi Raihani</i>
58	MEDICAL CARE - EXPLORATORY DATA ANALYSIS AND PREDICTION USING MACHINE LEARNING TECHNIQUES <i>Authors: Charu kaushik, Kamlesh Sharma</i>
239	ENHANCED RECOGNITION OF ARABIC NUMERALS BASED ON THE COMBINATION OF TESPAS AND MFCC ENCODERS <i>Authors: LAMKADAM Abdelmajid, KARIM Mohammed</i>
387	ADVANCED TRAFFIC VIOLATION DETECTION WITH TESSERACT OCR AND COMPUTER VISION <i>Authors: Gnanakumar D, Jairus Ponrabi S V, Ravindran N, Ahmed Razvi and Gokulakannan K</i>
393	LEAF ANALYSIS FOR DISEASE IDENTIFICATION USING TRANSFER LEARNING <i>Authors: Saroj Kumar, Satyam, Sachin, Rohit Beniwal</i>

SESSION 29	Material sciences and Machine learning application Saturday 29, June 2024 9h30-11h30
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(#G2)	
CHAIRS	HAMID BEZZOUT, IBN TOFAIL UNIVERSITY NAWFAL JEBBOR, MOULAY ISMAIL UNIVERSITY SARA TEIRJ, MOULAY ISMAIL UNIVERSITY
Meet Link	https://meet.google.com/xst-mrxy-mfb
299	MAGNETIC AND OPTICAL PROPERTIES OF MN2NIAL HEUSLER ALLOY FROM FIRST-PRINCIPLES CALCULATIONS <i>Author: YOUSSEF EL KRIMI</i>
300	MAGNETIC STABILITY, ELECTRONIC, ELASTIC, THERMODYNAMIC, OPTICAL, AND THERMOELECTRIC PROPERTIES OF CO2TISN, CO2ZRSN AND CO2HFSN HEUSLER ALLOYS <i>Author: RAIA MOULAY YOUSSEF</i>
365	ETUDE DE L'INHIBITION DE LA CORROSION D'UN ACIER DOUX EN MILIEU HCL 1M PAR UNE MOLECULE ORGANIQUE SYNTHETISEE A BASE PYRIMIDIQUE <i>Author: KHOUYA NAWFAL</i>
160	STRUCTURAL CHARACTERIZATION AND DIELECTRIC STUDY OF ZR DOPED LIT12(PO4)3 USED AS SOLID STATE ELECTROLYTE <i>Author: Mohammed Lazrak, Abdelhak Chouiekh, Yahya Ababou</i>
56	METAMATERIALS: REVOLUTIONIZING MICROWAVE FILTERING DEVICES <i>Author: Mouhssine Elbathaoui</i>
101	MODELING OF LIQUID-LIQUID EQUILIBRIUM BY ADDITION A CONTRIBUTION TO NRTL MODEL: APPLICATION TO SYSTEM WATER –PHOSPHORIC ACID-ORGANIC SOLVENT <i>Author: :ELMAAZOUZI Hamid, Messnaoui Brahim, Tounsi Abdessamad, Chatit Radouane, Hlali Abdelouahad</i>
156	THEORETICAL INVESTIGATION OF MAGNETIC-FIELD, DONOR POSITION AND QUANTUM CONFINEMENT EFFECT ON THE GROUND STATE BINDING ENERGY OF AN OFF-CENTRE DONOR IMPURITY IN SPHERICAL CORE/SHELL NANOSTRUCTURES <i>Author: ASMAA ZOUITINE</i>

SESSION 30	AI and Data Science Saturday 29, June 2024 9h30-11h30 (#G2)
CHAIRS	KARIM ELBOUCHTI, CADI AYYAD UNIVERSITY MOHAMMED BENABELLAH, MOHAMMED PREMIER UNIVERSITY JAOUAD FOSHI, MOULAY ISMAIL UNIVERSITY
Meet Link	https://meet.google.com/omw-pebr-mar
245	A NEW APPROACH TO MODEL A NON-LINEAR INDUCTANCE FOR MAGNETIC FLUX LEAKAGE TRANSFORMERS USING THE ANFIS NEURO-FUZZY TECHNIQUE <i>Author: Mouhcine Lahame, Hamid Outzguinrimt, Rajaa Oumghar, Boubkar Bahani, Mohammed Chraygane</i>
362	A COMPREHENSIVE ASSESSMENT OF THE CHATGPT EDUCATIONAL IMPACT <i>Author: Arbër Beshiri</i>
428	IMPORTANCE OF STANDARDIZED INFORMATION SYSTEMS IN MODERN HEALTHCARE <i>Author: hind BERRAMI</i>

466	UTILIZING MACHINE LEARNING FOR ACCURATE DENSITY PREDICTION IN ZN-ION BATTERY MATERIALS <i>Author: amine bayoud</i>
467	ADVANCED ALGORITHMIC OPTIMIZATION FOR MINIATURIZING MICROSTRIP PATCH ANTENNAS USING GENETIC ALGORITHMS <i>Author: bayoud ahmed</i>
398	UNVEILING THE FUTURE OF RHEUMATOLOGY: A LITERATURE REVIEW ON AI-POWERED DISEASE IDENTIFICATION AND PREDICTION <i>Author: Zineb Boubekri, Manar Jallal, Zineb Serhier</i>
447	ADVANCING HEALTHCARE: EVALUATING THE IMPACT OF HOSPITAL INFORMATION SYSTEMS <i>Author: hind BERRAMI</i>

SESSION 31	Control and Emerging Technologies Saturday 29, June 2024 9h30-11h30
CHAIRS	MOHAMMED TAOUSSI, SIDI MOHAMED BEN ABDELLAH UNIVERSITY HMAMOU ABDELMOUNIM, MOULAY ISMAIL UNIBERSITY NABIL EL AKCHIOUI, ABDELMALEK ESSAADI UNIVERSITY
Meet Link	https://meet.google.com/hsj-kdaw-wdu
182	CONTROL AND OBSERVATION OF ASYNCHRONOUS MOTOR SPEED USING HYPERBOLIC SLIDING MODE APPROACH <i>Author: Hicham Halimi, Mohammed ELGAROUAZ, Loubna Lazrak, Soukaina EL DAOUDI</i>
111	THERMOPHYSICAL AND MECHANICAL CHARACTERIZATIONS OF GAOUI CLAY STABILIZED BY GUM ARABIC <i>Authors: Mahamat Abdallah Ban-nah, BDALLAH DADI Mahamat, MAHAMAT Barka, BATRAN SIDDICK Adam, SALIF Gaye</i>
110	A ROBUST INTEGRAL QUASI-SLIDING MODE CONTROL FOR MPPT BASED PHOTOVOLTAIC SYSTEM WITH A DC-DC BOOST CONVERTER <i>Author: Jawhar Aiboudi, Ibrahim EL IDRISI, Ali EL ALAMI, Nawfal Jebbor, El-Mahjoub BOUFOUNAS</i>
153 (#G2)	ELABORATION ET CARACTERISATION DE TITANATE DE BARYUM PURS ET DOPES AU CUIVRE <i>Authors: Zouhir el khalafi, A. Farid, E. nour-said, L. Tajddine, Z. mohammed, H. AbdImonaime, EL G. Mohamed, EL B. Abdelhalim</i>
460 (#G2)	AN EFFICIENT ATTITUDE ESTIMATION BASED ON A MULTILAYER PERCEPTRON NEURAL NETWORK USING MULTI-DATA SENSOR FUSION <i>Authors: Hamza MAILKA, Mohamed Abouzahir, Mustapha Ramzi</i>
52	THE ROLE OF UNIVERSITIES IN AI-DRIVEN INNOVATION FOR SUSTAINABLE DEVELOPMENT <i>Author: Nasim Al Balushi</i>



***2024 International Conference on Circuit, Systems and Communication
(ICCSC 2024)
June 28-29, 2024, Fez, Morocco
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