

IEEE INTERNATIONAL SYMPOSIUM ON SIGNAL PROCESSING AND INFORMATION TECHNOLOGY (ISSPIT 2019)
FINAL SESSIONS SCHEDULE

keynote Speaker	Prof. Anant Madabhushi Case Western Reserve University		Talk Title: To Deep Learn or not Deep Learn: Use cases and Lessons learnt from Computational Pathology		Tuesday, Decmber 10, 2019 10:00 - 11:00
Session number	Session Title	No/Session	Paper title	Paper Author(s)	Date/ time
Session 1A	Neural Networks and Information Technology	1	An Algebraic Expert System with Neural Network Concepts for Cyber, Big Data and Data Migration	Richard Niall Mark Rudd-Orthner (University of Sheffield); Lyudmila Mihaylova (University of Sheffield, United Kingdom (Great Britain))	Tuesday, Decmber 10, 2019 11:00 - 13:00
		2	Scalogram Neural Network Activations with Machine Learning for Domestic Multi-channel Audio Classification	Abigail Copiaco (University of Wollongong in Dubai, United Arab Emirates); Christian H Ritz (University of Wollongong, Australia); Stefano Fasciani (University of Oslo, Norway); Nidhal Abdulaziz (University of Wollongong in Dubai, United Arab Emirates)	
		3	Convolution Neural Network Learning for Course Outcome Attainment Improvement	Raed Abu Zitar (Ajman University, United Arab Emirates), Ammar El-Hassan, and Oraib El-Sahli (PSUT, Jordan)	
		4	Automated Retinal Layer Segmentation of OCT Images Using Two-Stage FCN and Decision Mask	Yang Sun and Zeyu Fu (Newcastle University, United Kingdom (Great Britain)); Scott Stainton and Shaun Barney (Neura Health Group, United Kingdom (Great Britain)); William Innes and Jeffrey Hogg (Newcastle Eye Centre, United Kingdom (Great Britain)); Satnam Dlay (University of Newcastle, United Kingdom (Great Britain))	
		5	Automatic Colon Polyp Classification Using Convolutional Neural Network: A Case Study at Basque Country	Cristian Castillo (Universidad de Deusto, Spain); Aurelien Bour, Begonya Garcia-Zapirain and Sofia Zahia (University of Deusto, Spain)	
		6	Energy-Efficient Shortest Path Planning on Uneven Terrains: A Composite Routing Metric Approach	Mohamed Saad, Ahmed Salameh and Saeed Abdallah (University of Sharjah, United Arab Emirates)	
Session 1B	Signal Processing Theory-1	1	Hemispherical Harmonics Based Acoustic Source Localization in Mixed-field	Deepika Kumari (Indian Institute of Technology, Delhi, India); Vibhu Kaikhura (Delhi Technological University, India); Lalan Kumar (Indian Institute of Technology Delhi, India)	Tuesday, Decmber 10, 2019 11:00 - 13:00
		2	Generalized Refinement of Short-Term Fourier Spectra in Time- And Frequency-Domain and Its Combination with Polyphase Filterbanks	Mohammed Krini (Aschaffenburg University of Technology, Germany); Nilesh Madhu (Universiteit Gent - imec, Belgium)	
		3	Bayesian Transfer Learning Between Gaussian Process Regression Tasks	Milan Papez (Institute of Information Theory and Automation, Czech Academy of Sciences, Czech Republic); Anthony Quinn (Trinity College Dublin, Ireland)	
		4	Joint Channel and Timing-Offset Estimation in Two-way Relays	Saeed Abdallah, Mohamed Saad and Khawla Alnajjar (University of Sharjah, United Arab Emirates)	
		5	EEG Signal Extraction Utilizing Null Space Approach	Luay Yassin Taha (University of Windsor & Electrical and Computer Engineering, Canada); Esam Abdel-Raheem (University of Windsor, Canada)	
		6	Comparing Articulatory Consistency Between Native and Second Language Speakers	Narjes Alsadat Agha Seyed Mirza Bozorg (University of Kentucky, USA); Michael T. Johnson (University of Kentucky, unknown); Jeffrey Berry (Marquette, USA)	
		1	A 14-Bit 150KS/s SAR ADC with PGA for CMOS Image Sensor	Xiaowei Zhang (Zhejiang University, China); Wei Fan (Institute of VLSI Design, China); Jianxiong Xi and Lenian He (Zhejiang University, China)	

Session 1C	Signal Processing Implementation	2	Role of FPGA in Internet of Things Applications	Abdul-Rahman Al-Ali, Mohammed Elnawawy, Abid Farhan, Ahmad Al Nabulsi and Assim Sagahyroon (American University of Sharjah, United Arab Emirates)	Tuesday, December 10, 2019 11:00 - 13:00
		3	Planar Micro-electrodes Versus Cone Plate for Biological Cell Trapping and Characterization	Reda Mohamed (Helwan University & American University in Cairo, Egypt); Yehya Ghallab (Kuwait College of Science and Technology, Kuwait); Hamdy Abdelhamid (Electrical and Computer Engineering, Engineering and Information Technology department, Ajman University, Ajman, UAE); Yehea Ismail (American University in Cairo, Egypt); Mohamed T. El-Wakad (Helwan University, Egypt)	
		4	Compact Hardware of RGB to Gray Conversion Realized on FPGA and ASIC	Kaushal Kumar (National Institute Of Technology Patna, India); R K Mishra (NIT patna, India)	
		5	Micro-electrodes Based on CMOS Technology for Characterization of Biological Cells	Reda Mohamed (Helwan University & American University in Cairo, Egypt); Yehya Ghallab (Kuwait College of Science and Technology, Kuwait); Hamdy Abdelhamid (Ajman University, Ajman, UAE & Zewail City Of Science and Technology, United Arab Emirates); Yehea Ismail (American University in Cairo, Egypt); Mohamed T. El-Wakad (Helwan University, Egypt)	
		6	Temperature Compensation-Based Behavioral Modeling for Digital Predistortion of RF Power Amplifiers	Tomas Gotthans, Roman Marsalek and Jakub Gotthans (Brno University of Technology, Czech Republic)	
keynote Speaker	Prof. Manuel Casanova University of South Carolina	Talk Title: Imaging a Way of Thinking: The Long and Short about Brain Connections to Autism		Tuesday, December 10, 2019 14:00 - 15:00	
Session number	Session Title	No/Session	Paper title	Paper Author(s)	Date/ time
Session 2A	Information Processing; Computer Networks; Information Technology	1	Development of an Efficient Network Intrusion Detection Model Using Extreme Gradient Boosting (XGBoost) on the UNSW NB15 Dataset	Anwar Husain, Ahmed Salem, Carol M. Jim and George Dimitoglou (Hood College, USA)	Tuesday, December 10, 2019 15:00 - 17:00
		2	A Computationally Efficient BiLSTM Based Approach for the Binary Sentiment Classification	Zabit Hameed, Begoña García Zapirain and Ibon Oleagordia Ruiz (University of Deusto, Spain)	
		3	Barriers and Drivers of Using Social Media in E-governance: A Global Case Study	Hanan Hussain (Ajman University, United Arab Emirates)	
		4	Exploiting Vehicular Communication Systems for Improving Traffic Safety in the UAE	Farooq Mahmood, Ahmad Qasrawi and Henry Alexander (United Arab Emirates University, United Arab Emirates); Moumena Chaqfeh (UAE University, United Arab Emirates); Hesham Elsayed (United Arab Emirates University, United Arab Emirates)	
		5	Evaluating the Impact of Feature Selection Methods on SNMP-MIB Interface Parameters to Accurately Detect Network Anomalies	Ghazi Al-Naymat (Ajman University, United Arab Emirates); Ahmed Hambouz and Mouhammd Al-kasasbeh (Princess Sumaya University for Technology, Jordan)	
		1	Bayesian Filtering for States Uniformly Distributed on a Parallelotopic Support	Lenka Kukišová Pavelková and Ladislav Jirsa (Institute of Information Theory and Automation, Czech Republic); Anthony Quinn (Trinity College Dublin, Ireland)	
		2	A Modified Filtered-x LMAT Algorithm for Active Noise Control of Impulsive Noise	Abid Hussain, Alina Mirza and Ayesha Zeb (National University of Sciences and Technology, Pakistan); Mir Umair (National University of Sciences and Technology & Huawei, Pakistan)	

Session 2B	Signal Processing Theory-2	3	MLLR-PRSW for Kinematic-Independent Acoustic-to-Articulatory Inversion	Narjes Alsadat Agha Seyed Mirza Bozorg (University of Kentucky, USA); Michael T. Johnson (University of Kentucky, unknown)	Tuesday, Decmber 10, 2019 15:00 - 17:00
		4	A Digital Predistortion Method for Fast Frequency-Hopping Systems	Wensheng Pan (University of Electronic Science and Technology of China, China); Lanfeng Xie (AVIC Chengdu Aircraft Design and Research Institute, China); Xiangjie Xia, Chengzhe Shi and Yufeng Ye (University of Electronic Science and Technology of China, China); Peizhang Cui (Army Engineering University, China); Ying Liu and Youxi Tang (University of Electronic Science and Technology of China, China)	
		5	A Digitally-Assisted Self-Interference Cancellation for Full-Duplex Phased Array Radar	Wensheng Pan, Qiannan Zhang, Peng Yao, Xiangjie Xia, Chengzhe Shi, Chenxing Li and Yufeng Ye (University of Electronic Science and Technology of China, China); Peizhang Cui (Army Engineering University, China); Ying Liu and Youxi Tang (University of Electronic Science and Technology of China, China)	
		6	Nonuniform Interpolation Technique for Fir Filtering in Digital Alias-Free Signal Processing	Hikmat Y. Darawsheh and Andrzej Tarczynski (University of Westminster, United Kingdom (Great Britain))	
Session 2C	Signal Processing Applications : Audio-2	1	A Survey on Ad Hoc Signal Processing: Applications, Challenges and State-of-the-Art Techniques	Shahab Pasha (Mid Sweden University, Sweden); Christian H Ritz (University of Wollongong, Australia); Jan Lundgren (Mid Sweden University, Sweden)	Tuesday, Decmber 10, 2019 15:00 - 17:00
		2	Classifier Based Early Detection of Pathological Voice	Rumana Islam (Ajman University, United Arab Emirates); Mohammed Tarique (Ajman University of Science and Technology, United Arab Emirates)	
		3	Detecting Sarcastic and Complimentary Exclamations in English with Intonation Patterns and Acoustic Features: A Case Study	Weijing Zhou (Yangzhou University, China); Francis Nolan (University of Cambridge, UK); Aijun Li (Chinese Academy of Social Science, China); Jian Gong (Jiangsu University of Science and Technology, China); Xiaojiao Xue (Yangzhou University, China); Xiaoli Ji (Jiangsu University of Science and Technology, China)	
		4	A Unified Front-end Anti-interference Approach for Robust Automatic Speech Recognition	Yunming Liang (Chongqing University of Posts and Telecommunications, China); Yongbao Ma (Suresense Technology Co. Ltd, China); Hongqing Liu and Yi Zhou (Chongqing University of Posts and Telecommunications, China)	
		5	Auditory Inspired Acoustic Model for Hybrid ASR System Using Gammatone Based Gabor Filters	Anirban Dutta (National Institute of Technology Meghalaya, India); Gudmalwar Prabhakar (National Institute of Technology Meghalaya, India); Chevula Venkata Rama Rao (NIT Meghalaya, Shillong & National Institute of Technology Meghalaya, India)	
		6	Nonlinearity-Robust Linear Acoustic Echo Canceller Using the Maximum Correntropy Criterion	Hocine Merabti (Université du Québec à Trois-Rivières, Canada); Daniel Massicotte (Université du Québec a Trois-Rivieres, Canada); Wei-Ping Zhu (Concordia University, Canada)	
		1	Reinforcement Learning Driven Energy Efficient Mobile Communication and Applications	Syed Muhammad Asad and Metin Ozturk (University of Glasgow, United Kingdom (Great Britain)); Rao Naveed Bin Rais (Ajman University, UAE, United Arab Emirates); Ahmed Zoha, Sajjad Hussain, Qammer H Abbasi and Muhammad Ali Imran (University of Glasgow, United Kingdom (Great Britain))	

Session 3A	Mobile Computing and Applications	2	Detection of Adversary Nodes in Machine-To-Machine Communication Using Machine Learning Based Trust Model	Elvin Eziana (University of Windsor, Canada); Farooq A Awin (University of Windsor, Canada & University of Tripoli, Libya); Saneeha Ahmed (University of Windsor, Canada & NED University of Engineering and Technology, Pakistan); Sabbir Ahmed and Kemal Tepe (University of Windsor, Canada)	Wednesday, December 11, 2019 08:30 - 10:30
		3	Game-theoretic Approach to Fleet Management for Vehicle to Grid Services	Haile-Selassie Rajamani, Ziad Choucair and Ioannis Manikas (University of Wollongong in Dubai, United Arab Emirates)	
		4	Twitter Analytics for Discovering Socially Important Locations for Business Improvement	Haya Alaskar (Prince Sattam Bin Abdulaziz University, Saudi Arabia)	
		5	Daily Routine Recognition with Visual Interactive Labeling by Fusing Acceleration and Audio Signals	Thomas Kuebert (Technical University of Darmstadt & Sivantos GmbH, Germany); Henning Puder (Sivantos GmbH & Sivantos GmbH, Germany); Heinz Koepl (Technische Universität Darmstadt, Germany)	
		6	Smart Assistive Glasses for Alzheimer's Patients	Wessam Shehieb, Mohamed Ait Gacem, Saifeddin Alghayini, Muaid Saeed and Ahmed Ghazal (Ajman University, United Arab Emirates); Mustahsan Mir (Ajman University of Science & Technology, United Arab Emirates)	
Session 3B	Signal Processing Applications: Audio-1	1	A Fusion Model for Robust Voice Activity Detection	Guan-Bo Wang and Wei-Qiang Zhang (Tsinghua University, China)	Wednesday, December 11, 2019 08:30 - 10:30
		2	End-to-End Topic Classification Without ASR	Zexian Dong (Tsinghua University, China); Jia Liu and Wei-Qiang Zhang (Tsinghua University, China)	
		3	A Complex Matrix Factorization Approach to Joint Modeling of Magnitude and Phase for Source Separation	Chaitanya Ahija (Carnegie Mellon University, USA); Karan Nathwani (Indian Institute of Technology Jammu, India); Rajesh M Hegde (Indian Institute of Technology Kanpur, India)	
		4	A Robust GSC for Microphone Array Using Coherence and Signal-to-Interference Ratio	Qingsong Jiang, Yi Zhou and Hongqing Liu (Chongqing University of Posts and Telecommunications, China)	
		5	Intelligibility Improvement Using Kalman Filtering & EM Approach in Formant Shifting Framework	Karan Nathwani (Indian Institute of Technology Jammu, India)	
		6	Electrodynamic Loudspeaker Linearization Using a Low Complexity pth-Order Inverse Nonlinear Filter	Hocine Merabti (Université du Québec à Trois-Rivières, Canada); Daniel Massicotte (Université du Québec à Trois-Rivières, Canada); Wei-Ping Zhu (Concordia University, Canada)	
Session 3C	Neural Network Signal Processing	1	PYNQ-Torch: a Framework to Develop PyTorch Accelerators on the PYNQ Platform	Stefano Fasciani (University of Oslo, Norway); Vohra Manohar (University of Wollongong in Dubai, United Arab Emirates)	Wednesday, December 11, 2019 08:30 - 10:30
		2	Deep Temporal Filter: An LSTM Based Approach to Filter Noise from TDC Based SPAD Receiver	Gurjeet Singh (Oregon State University, USA); Sunmiao Sunmiao (Fudan University, China); Patrick Chiang (PhotonIC Technologies, China)	
		3	Convolutional Neural Networks to Classify Oil, Water and Gas Wells Fluid Using Acoustic Signals	Nafiseh Vahabi and David Selviah (University College London, United Kingdom (Great Britain))	
		4	Fault Detection and Isolation in Induction Motor Using Weightless Neural Network	Anam Abid (University of Engineering and Technology, Peshawar, Pakistan); Zo-Afshan Abid (College of Electrical and Mechanical Engineering, NUST, Pakistan); Aaisha Abid (University of Engineering and Technology, Peshawar, Pakistan)	

		5	An Efficient Facial Feature Extraction Method Based Supervised Classification Model for Human Facial Emotion Identification	Rakesh Ranjan (National Institute of Technology, Patna, India); Bikash Chandra Sahana (National Institute of Technology Patna India, India)	
		6	Singing Voice Separation Based on Deep Regression Neural Network	Shuqian Yang (Beijing Institute of Technology, China); Wei-Qiang Zhang (Tsinghua University, China)	
Special Session 1	Fractional Dynamical Systems and Applications				Wednesday, December 11, 2019 08:30 - 10:30
keynote Speaker	Prof. A. R. Al-Ali American University of Sharjah, UAE	Talk Title: Internet of Things Role in Smart Cities Applications			Wednesday, December 11, 2019 11:15 - 12:15
Session number	Session Title	No/Session	Paper title	Paper Author(s)	Date/ time
Session 4A	Information Processing and Health Informatics	1	Depthwise Separable Convolutional Neural Network for Skin Lesion Classification	Sara Hosseinzadeh Kassani (University of Saskatchewan, Canada); Peyman Hosseinzadeh Kassani (University of Tulane, USA); Michal J. Wesolowski, Kevin A. Schneider and Ralph Deters (University of Saskatchewan, Canada)	Wednesday, December 11, 2019 13:00 - 15:00
		2	Developing a Smart 3D Printed Canine Orthosis	Jaione Antoñana, Begoña García Zapirain and Ana Megia-Macias (University of Deusto, Spain)	
		3	Localization of Phonocardiogram Signals Using Multi-level Threshold and Support Vector Machine	Anam Abid (University of Engineering and Technology, Peshawar, Pakistan); Zo-Afshan Abid (College of Electrical and Mechanical Engineering, NUST, Pakistan); Hussain Farhan (Hanyang University, Korea)	
		4	Process Automation Tool for Academic Advising	Mirna Nachouki (Ajman University, United Arab Emirates); Mahmoud Abou Naaj (Ajman University of Science & Technology, United Arab Emirates)	
		5	Discerning Genuine and Acted Smiles Using Neural Networks	Mostafa Moussa (American University of Sharjah, United Arab Emirates); Usman Tariq (AUS, United Arab Emirates); Fares Yahya (American University of Sharjah, Malaysia); Hasan Al-Nashash (AUS, United Arab Emirates)	
		6	Adaptive Gesture Recognition System for Robotic Control Using Surface EMG Sensors	Benjamin Marcheix (Université de Poitiers, France); Bryan Gardiner and Sonya A Coleman (University of Ulster, United Kingdom (Great Britain))	
Session 4B	Image and Video Processing-2	1	Employing Unsharp Masking for Contrast Enhancement in Reversible Data Hiding	Iyad Jafar (Princess Sumaya University for Technology, Jordan); Hamzah Maghaydah (Electrical Distribution Company, Jordan); Khalid A. Darabkh (The University of Jordan, Jordan)	Wednesday, December 11, 2019 13:00 - 15:00
		2	An Adaptive Method for Vein Recognition Enhancement Using Deep Learning	Soheil Varastehpour, Nilufar Baghaei, Hamid Sharifzadeh, Iman Ardekani and Xavier Francis (Unitec Institute of Technology, New Zealand)	
		3	Performance Evaluation of State-Of-The-Art Filtering Criteria Applied to SIFT Features	Kangbéni Djotiname Konlambigue (University of Rouen, France); Paul Honeine (Université de Rouen, France); Jean-Baptiste Pothin (DataHertz, France); Abdelaziz Bensrhair (LITIS Laboratory, France)	

		4	Multiplatform System for Hand Gesture Recognition	Tomas Bravenec and Tomas Fryza (Brno University of Technology, Czech Republic)	
		5	Underwater Circular Object Positioning System Based on Monocular Vision	Yajie Deng and Huigang Wang (Northwestern Polytechnical University, China)	
Session 4C	Biomedical Engineering-1	1	Fast Continuous Wavelet Transform for Brain Computer Interface Using Piecewise Polynomials	Nana Arizumi and Tetiana Aksenova (University Grenoble Alpes, CEA, LETI, CLIMATEC, France)	Wednesday, December 11, 2019 13:00 - 15:00
		2	ECG Arrhythmia Discrimination Using SVM and Nonlinear and Non-Stationary Decomposition	Fakheraldin Y. O. Abdalla, Longwen Wu, Hikmat Ullah, Hassan Mkindu, Yuting Nie and Yaqin Zhao (Harbin Institute of Technology, China)	
		3	ECG Signal Processing and Analysis for Accurate Features Extraction	Mujeeb Rahman Kanhirakadavath (Ajman University, United Arab Emirates); Monica Subashini (Vellore Institute of Technology, India)	
		4	Analysis and Recovery Monitoring of Meibomian Gland Dysfunction Disease Using Hyperspectral Imaging	Wessam Shehieb, Maher Assaad and Ayman E. Tawfik (Ajman University, United Arab Emirates); Nor Ashidi Mat Isa (Universiti Sains Malaysia, Malaysia)	
		5	Diabetic Retinopathy Classification Using a Modified Xception Architecture	Sara Hosseinzadeh Kassani (University of Saskatchewan, Canada); Peyman Hosseinzadeh Kassani (University of Tulane, USA); Reza Khazaeinezhad (Beckman Laser Institute, USA); Michal J. Wesolowski, Kevin A. Schneider and Ralph Deters (University of Saskatchewan, Canada)	
Special Session 2	Arabic Natural Language Processing: Algorithms, Resources, Tools, Techniques and Applications			Wednesday, December 11, 2019 13:00 - 15:00	
Session 5A	Machine Learning and Data Mining	1	Fast Generalized Chan-Vese Model for Plant/soil Segmentation to Estimate Percentage of Ground Cover in Agricultural Images	Yamina Boutiche (Welding and NDT Research Center CSC, Algeria); Abdelhamid Abdesslem (Sultan Qaboos University, Oman); Naim Ramou (Communications Systems Laboratory, National Polytechnic School, Algiers, Algeria); Nabil Chetih (University of Houari Boumediene, Algeria)	Wednesday, December 11, 2019 15:00 - 17:00
		2	Performance Analysis and Ranking of Data Mining Algorithms Across Multiple Datasets	Mohamed Nasor M. Khalel (Ajman University, United Arab Emirates)	
		3	Automated Classification of Ganglions and Spiculated Masses: A Case Study Mexico's National Institute of Cancerology	Cristian Castillo (Universidad de Deusto, Spain); Begonya Garcia-Zapirain and Sergio Lenis (University of Deusto, Spain)	
		4	Spatiotemporal Traffic Flow Forecasting for PHETs Based on Data Mining and Deep Learning	Xiangzhou Luo and Xushan Qing (University of Electronic Science and Technology of China, China); Huimiao Chen (Sparkzone Institute, China)	
		5	A Hybrid Deep Physics Neural Network Model for Unsupervised Autoencoder to Perform Data Conditioning	Srinath Madasu (Halliburton, USA)	
		6	Noise Robust Sound Event Detection Using Deep Learning and Audio Enhancement	Tongtang Wan (Chongqing University of Posts and Telecommunications, China); Yongbao Ma (Suresense Technology Co. Ltd, China); Yi Zhou and Hongqing Liu (Chongqing University of Posts and Telecommunications, China)	
		1	A Two-Step Detector for Distributed Target Detection	Jun Liu and Ning Chen (University of Science and Technology of China, China)	

Session 5B	Signal Processing Applications : Radar and Array	2	Geometry-Assisted Multi Surface-Gateways Placement Topologies for Underwater Sensor Networks	Hussain Albarakati and Reda Ammar (University of Connecticut, USA); Raafat S Elfouly (Rhode Island College, USA); Sanguthevar Rajasekaran (University of Connecticut, USA)	Wednesday, December 11, 2019 15:00 - 17:00
		3	BER Performance of Various Algorithms in mMIMO Wireless Communications	Shihab Jimaa and Jawahir Al-Ali (Khalifa University, United Arab Emirates)	
		4	Adaptive Detection of a Rank-One Signal Based on Wald Test	Weijian Liu (Wuhan Electronic Information Institute, China); Changfei Wu (Air Force Early Warning Academy, China); Dang Xie (Wuhan Electronic Information Institute, China); Yao Wu (92602 Unit of the PLA, China); Bin Zhang (Shijiazhuang Flight College, China); Jun Liu (University of Science and Technology of China, China)	
		5	Full Duplex Radio in High Density Future Wireless Communication Networks	Salma Elsherif (The German University in Cairo & GUC, Egypt); Ahmed E. El-Mahdy (The German University in Cairo, Egypt); Anatolij Zubow (Technische Universität Berlin, Germany)	
		6	Total Outage Probability of a Multihop Hybrid FSO/MMW System	George Roumelas and Hector Nistazakis (University of Athens, Greece); Konstantinos Aidinis (Ajman University, United Arab Emirates); George Varotsos (University of Athens, Greece); Erich Leitgeb (Graz University of Technology, Austria)	
Session 5C	Biomedical Engineering-2	1	Modulated Retro-Reflector Transdermal Optical Wireless Communication Systems with Wavelength Diversity over Skin-induced Attenuation and Pointing Errors	George Varotsos and Hector Nistazakis (University of Athens, Greece); Konstantinos Aidinis (Ajman University, United Arab Emirates); George Roumelas (University of Athens, Greece); Fadi Jaber and Mujeeb Rahman Kanhirakadavath (Ajman University, United Arab Emirates)	Wednesday, December 11, 2019 15:00 - 17:00
		2	The Use of Fourier Phase Symmetry for Thin Vessel Detection in Retinal Fundus Images	Sayed Ahmad and Mohammad Khan (Alghurair University, United Arab Emirates); Tariq Mahmood (COMSATS Institute of Information Technology, Islamabad, Pakistan); Kahtan Aziz (Al-Ghurair University, United Arab Emirates); Nighat Mir (Effat University, Saudi Arabia); Emhemed Elbakush (Al Ghurair University, United Arab Emirates)	
		3	Magnetic Resonance-based Wireless Power Transfer for Implantable Biomedical Microelectronics Devices	Mengyao Yuan, Jinwei Zhao, Rupam Das, Rami Ghannam and Qammer H Abbasi (University of Glasgow, United Kingdom (Great Britain)); Maher Assaad (Ajman University, United Arab Emirates); Hadi Heidari (University of Glasgow, United Kingdom (Great Britain))	
		4	Haar Wavelet Based Approach for Short Tandem Repeats (STR) Detection	Tirthankar Paul and Seppo Vainio (University of Oulu, Finland); Juha Rönning (Oulu University Secure Programming Group, Finland)	
keynote Speaker	Prof. Ayman El-Baz University of Louisville	Talk Title: Big Data for Smart and Connected Health		Thursday, December 12, 2019 09:00 - 10:00	
Session number	Session Title	No/Session	Paper title	Paper Author(s)	Date/ time
Session 6A	Signal Processing Theory-3	1	Target Motion Analysis Using Doppler Radar's Frequency Measurements	Ehsan Ul Haq (University of Melbourne, Australia)	Thursday, December 12, 2019 10:00 - 12:00
		2	Direction Finding for a Mixture of Single-Transmission and Dual-Transmission Signals	Xiang Lan and Wei Liu (University of Sheffield, United Kingdom (Great Britain))	
		3	New Constant Modulus Blind Equalizer with Optimum Tap-length for QAM Signals	Salem Alsaid and Esam Abdel-Raheem (University of Windsor, Canada); Khaled A Mayyas (Jordan University of Science and Technology, Jordan)	

		4	Sensitivity of the General Linear Model to Noise Assumptions	Sujoy Chakraborty (Stockton University, USA)	
		5	Multilevel Approaches to Fine Tune Performance of Linear Algebra Libraries	Sanaz Gheibi, Tania Banerjee, Sanjay Ranka and Sartaj Sahni (University of Florida, USA)	
Session 6B	Signal Processing Applications: Communication	1	A Fast Algorithm for Power-Controlled Capacity Maximization in Wireless Networks	Mohamed Saad and Saeed Abdallah (University of Sharjah, United Arab Emirates)	Thursday, December 12, 2019 10:00 - 12:00
		2	LS Algorithm for PAR Reduction in OFDM Based Massive MIMO Broadcast Systems	Abdul Wakeel (National University of Sciences and Technology, Pakistan); Werner Henkel (Jacobs University Bremen, Germany); Mir Umair (National University of Sciences and Technology & Huawei, Pakistan)	
		3	Ideal Number of Computers for Real-Time Underwater Computing Systems	Mohammad Alsulami and Reda Ammar (University of Connecticut, USA); Raafat S Elfouly (Rhode Island College, USA); Huda M Aldosari and Abdullah Alenizi (University of Connecticut, USA)	
		4	An Improved Clock Synchronization Algorithm for Wireless Sensor Network of Underground Water Supply Pipeline	Gaizhi Guo (Inner Mongolia Normal University, China)	
		5	Orthogonal Time Frequency Space Modulation: Pilot Power Allocation and Nonlinear Power Amplifiers	Roman Marsalek and Jiri Blumenstein (Brno University of Technology, Czech Republic); Ales Prokes (Brno University of Technology & Sensor, Information and Communication Systems Research Centre, Czech Republic); Tomas Gotthans (Brno University of Technology, Czech Republic)	
		6	Examination of Outage Probability for Next Generation Non Orthogonal Multiple Access Scheme in Uplink and Downlink Scenario	Lokesh Bhardwaj (National Institute of Technology); R K Mishra (NIT patna, India); Ravi Shankar (MITS Madanapalle, India)	
Session 6C	Image and Video Processing-1	1	Fast Enhanced DWT Based Video Micro Movement Magnification	Gamal El-Din Fahmy (Kuwait College of Science and Technology, Kuwait); Omar Fahmy (Future University, Egypt); Mamdouh Fahmy (Assiut University, Egypt)	Thursday, December 12, 2019 10:00 - 12:00
		2	Effective Images Splicing Detection Based on Decision Fusion	Anh-Thu Phan-Ho (LM2S, University of Technology of Troyes, France); Florent Retraint (UTT & University of Technology of Troyes, France)	
		3	NSST Based MRI-PET/SPECT Color Image Fusion Using Local-Features Fuzzy-Rules and NSML in YIQ-space	Hikmat Ullah, Yaqin Zhao, Longwen Wu, Fakheraldin Y. O. Abdalla and Hassan Mkindu (Harbin Institute of Technology, China)	
		4	Suppression and Enhancement of Overlapping Bounding Boxes Scores in Object Detection	Ye Pan and Feng Dong (University of Electronic Science and Technology of China, China)	
		5	Feature Enhancement and Denoising of a Forensic Shoeprint Dataset for Tracking Wear-And-Tear Effects	Xavier Francis and Hamid Sharifzadeh (Unitec Institute of Technology, New Zealand); Angus Newton (Institute of Environmental Science and Research, New Zealand); Nilufar Baghaei and Soheil Varastehpour (Unitec Institute of Technology, New Zealand)	
		6	Object Detection Techniques: Overview and Performance Comparison	Ayman E. Tawfik (Ajman University, United Arab Emirates); Vladimir Stankovic and Mohammed Noman (University of Strathclyde, United Kingdom (Great Britain))	