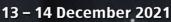


International Japan-Africa Conference on Electronics, Communications, and Computations

JAC-ECC 2021 (Online)





JAC-ECC is a venue for extending collaboration between prominent African, and International researchers from academia and industry in the fields of electronics, communications, and computer engineering the conference will be held at Alexandria, Egypt, from 13-14 December, 2021 will include keynote speeches, technical and special sessions, and tutorials on the state-of-the-art topics. Research papers are solicited in one of the following tracks, where all submissions will be peer-reviewed. The topics in each track are mentioned below but are not limited to the following areas:

Selected Topics in Computer Hardware and Embedded/ Smart Systems

- Parallel Computer Architectures Multi-Core and Multiprocessor
- Architectures Impact of Technology on Architecture
 Embedded/Reconfigurable Architectures GPGPU/APU Heterogeneous Systems – Architectures for Cloud-Based HPC and Data Centers - Impact of Compilers and System SW on Architecture – Performance Modeling, Scalability, and Evaluation - Architecture for Novel Application Workloads
- Fault-Tolerant

Selected Topics in Communications

- * PHY layer, signal transmission and reception.

- Spectrum sharing, spectrum management, and cognitive radio.
 5G and Next Generation Communication Systems.
 MZM, DZD, and Ad-hoc Networks.
- * UAV Wireless Networks and its applications. * Energy Harvesting and Green Communications . * Wireless network security * Underwater
- communications * Wireless body area networks.
 Wireless Sensor Networks . * Optical communications and Photonics.

Selected Topics in Signal, Image, and Video Processing

- * Image and Video Processing * Analog and Digital Signal Processing. * Biomedical Signal Processing * Multimedia Systems and Applications * Visual Communications Systems * Applications of Internet of Things (IoT)

Selected Topics in Internet of Things (IoT)

- Systems on chip for IoTs. * IoT system architecture,
- * IoT enabling technologies, * IoT communication and networking protocols, * IoT services and applications, * Security and privacy in embedded IoT scenarios, * Experiences in building smart wearable IoT platforms, * Power consumption and optimization in embedded Fault-tolerance and reliability in embedded IoT applications,
- * Middleware and platforms for embedded loT applications
 * The social implications of IoT * Wireless Energy Harvesting for IoT

Selected Topics in Biomedical Engineering and Applications

- Biomedical Devices for Computer Interaction. * Brain-Computer Interfaces and Brain Imaging. * Telemedicine and Health Monitoring Systems. * Wearable Sensors and Systems. * Video and Image Analysis for Physiological Signals.
- * Biomedical Embedded and Mobile Systems

// Selected Topics in Artificial Intelligence

- Deep Learning / Machine Learning Computational Intelligence Pattern Recognition Image Processing / Computer Vision
- Data Mining Natural Language Processing Sentiment Analysis
 Agents and Multi-Agent Systems
- Biometrics Autonomous Robots Intelligent Transportation

Selected Topics in Big Data Analytics and Cloud Computing

- Parallel and Distributed Computing of Big Data Cloud and Fog Computing Security in cloud Cluster and Grid Computing Big Data Mining Big Data Applications / Computing / visualization

 Volume, Velocity, Variety, Value and Veracity of Big Data

 Quantum Computing Mobile Computing Bioinformatics •Data and Information Visualization Distributed Systems and Databases

- Data-driven Algorithms and Applications

Selected Topics in Circuits and Systems

- Computer Aided Network Design * VLSI Systems and Applications Neuromorphic Systems. * Analog and Mixed Signal Integrated Circuits. * Digital Integrated Circuits. * Digital Integrated Circuits, SOC, and NOC. * Linear and Non-linear Circuits and Systems. * Embedded Electronics. * RFICs and Microwave Systems. * Power Management and Energy Harvesting. * Hardware/Software Co-design. * Biomedical
- Circuits and Systems. * Sensory Circuits and Systems. Embedded systems for Vehicular applications.

Selected Topics in Microwave and Antennas

- *Multiple Antenna Systems, Coding and Cooperative Communications
 * RF and mmWave * Electromagnetic Fields and waves
 * Antenna Design and Applications * Scattering and propagation,
 * Millimeter-wave/THz * Broadband and multi-band antennas,
 * MIMO antennas, * Active adaptive and smart antennas, * Antenna measurements, reconfigurable antennas, and others. * Wireless power transfer * Electromagnetics in biology and medicine

Important Dates

- * Paper Submission Deadline: October 31, 2021
- * Notification of Acceptance: November 15, 2021
- * Camera Ready Version Due: November 22, 2021

Paper Submission

Prospective authors are invited to submit full-length, 4 page papers in IEEE two-column formats including diagrams and references. The title page should include author(s) name(s), affiliation, mailing address, telephone, fax, and e-mail address. The author should indicate one or two of the above categories that best describe the topic of the paper. More information for authors is available on the conference website.

Conference Organizing

Conference Chairs

- Mohammed Abo-Zahhad, E-JUST, Egypt
- * Haruichi Kanaya, Kyushu University, Japan

Technical Committee Co-Chairs

- Amin Shoukry, E-JUTS, Egypt
- * Hossam Shalaby, E-JUST, Egypt
- Mostafa I. Soliman, E-JUST, Egypt
- Adel Bedair, E-JUST, Egypt
- * Sabah M. Ahmed, E-JUST, Egypt

Organizing Committee Co-Chairs

- Osamu Muta, Kyushu University, Japan
- Maha Elsabrouty, E-JUST, Egypt
- Samir Elsagheer, E-JUST, Egypt
- Ahmed Abd El-Malek, E-JUST, Egypt
- Rami Zewail, E-JUST, Egypt

Organizing Committee:

- Hussien Mouftah, Ottawa Univesity, Canada
 Om Parkash Malik, University of Calgary, Canada

- Damian Flynn, University College Dublin, Ireland
 Hadia ElHennawy, Ain Shams University, Egypt
 Hesham Elbadawy, National Telecommunication Institute, Egypt
 Gamal Famhy, Kuwait University, Kuwait
 Ahmed M. Attiya, Electronics Research Institute, Egypt
- Moustafa Youssef, Alexandria University, Egypt Yehea Ismail, AUC Zewail City, Egypt

- Abbas Omar, University of Akron, USA
 Ahmad Al ajlouni, Yarmouk University, Jordan
 Said El-Khamy, Alexandria University, Egypt
 Moustafa Hussein Aly, AASTMT, Egypt
 Diaa Khalil, Ain Shams University, Egypt
- EL-Sayed Mostafa Saad, Helwan University, Egypt
 El-Sayed Elrabie, Menofia University, Egypt

- Mohammed S. Sayed, E-JUST, Egypt
- Ahmed Allam, E-JUST, Egypt
- - Hesham F. A. Hamed, Minia University, Egypt
 Ahmed Hassan, Nile University, Egypt
 - Elsayed Esam M. Khaled, Assuit University, Egypt
 - Mohamed Abbas, King Saud University, Saudi Arabia
 Farhad Mehdipour, Otago Polytechnic University New Zealand
 Tanemasa Asano, Kyushu University, Japan
 Haris Gacanin, RWTH Aachen University, Germany

 - Koji Inoue, Kyushu University, Japan
 Ramesh Pokharel, Kyushu University, Japan
 Adel Barakat, Kyushu University, Japan

 - Sherif Rabia, E-JUST, Egypt
 Walid Gomaa, E-JUST, Egypt
 Moataz Abdelwahab, E-JUST, Egypt
 Tamer F. Megahed, E-JUST, Egypt