The 6th International Conference for Electronic Design (ICED 2022)

Monday, August 29, 2022 - Tuesday, August 30, 2022

Perlis, Malaysia

Conference Tracks

1. Artificial Intelligent

● AI and Creativity ● Ambient Intelligence ● Bayesian Networks ● Case-Based Reasoning ● Cognitive Systems ● Constraint Satisfaction ● Data Mining ● Data Science ● Deep Learning ● e-Discovery ● Evolutionary Computing ● Explainable Artificial Intelligence ● Fuzzy Systems ● Machine Learning ● Model-Based Reasoning ● Natural Language Processing ● Neural Networks ● Ontologies

2. Signal & Image processing

● Applied Digital Signal Processing ● Coding and Transmission ● Signal Processing in Communications ● Statistics and Statistical Signal Processing ● Emerging Technologies in Digital Signal Processing ● Image & Signal Processing Applications ● Image Acquisition and Display ● Image and Video Processing & Analysis ● Image Formation ● Image Scanning, Display and Printing ● Storage and Retrieval ● Biomedical signal and image analysis ● Real-time signal and image processing algorithms and architectures.

3. Internet of Things

● Software-defined networks for IoTs ● Architecture, models, and tools for IoTs ● Routing protocol,data dissemination, and offloading algorithms design for IoTs ● Security, privacy, and trust for IoTs ● Big data mining and analytics for IoTs ● Application of cloud computing and fog computing in IoTs ● Machine learning models and methods for IoTs ● IoTs applications and technologies for smart worlds and smart cities ● Green computing and sustainable computing for IoTs ● New applications on IoTs ● IoT on eHealth and Ambient Assisted Living ● IoT on energy management ● IoT in industry.

4. Embedded System & SoC

● Novel Architectures for Accelerators in High Performance Embedded Systems ● Application-specific and Domain specific Embedded Heterogeneous ● Multicore Systems ● Embedded Reconfigurable Processors ● Software tools, Compilation techniques and optimizations, and Code generation for Reconfigurable Architectures ● Architecture synthesis from Functional Languages Descriptions ● Virtualization and Energy-aware Secure, Reliable, and High ● Availability Multi-core Architectures ● Embedded Parallel Systems and Multiprocessor Systems-On-Chip ● Application-level Resource Management of Multi-core Architectures; ● Memory Systems and Management for big data.

5. Antenna & Microwave

● Antenna systems and architectures ● Antenna theory ● Design and technology for array antennas ● Analysis of array antennas ● Antenna interactions and couplings ● Mm-wave antennas ● Sub mm-wave,THz and nano-optical antennas ● Multiband and multifunctional antennas ● Wideband and UWB antennas ● Electrically Small Antennas ● Wearable and implantable antennas ● Lens antennas ● Reflector, feed systems, and components.

6. Micro/ nanoelectronic

● Design and test of high complexity systems integration ● SoC, MPSoC, NoC, SIP, and NIP design and test ● Process technologies, CMOS, BJT, BiCMOS, GaAs ● 3-D integration design and analysis ● Emerging device technologies and circuits, ● Microelectronics processing and materials ● Semiconductor processing ● Modern electronics materials ● Solid-state electronics ● Quantum electronics ● Thin solid films ● Nanoprocessing, nanotechnology and nanofabrication.

7. Optic & Photonics

● Laser Systems ● Optics & Lasers in Medicine ● Optoelectronics ● Optical Communications & Networking ● Advancements in Photonics ● Nano-Photonics & Bio-Photonics ● Quantum Science & Technology ● Technologies in Lasers, Optics & Photonics ● Applications & Trends in Optics & Photonics ● Fiber Laser Technology ● Optical Physics ● Optical Fiber ● Surface Enhanced Spectroscopy ● Medical & Bio-Optics.

8. Green Electronics

● Green Circuits & Systems ● Advances in Green Electronics ● Green Electronics Design & Manufacturing ● Energy Harvesting ● Solar Cell ● Piezo Energy ● Thermoelectric Generator ● Low Power Systems ● Embedded Audio & Video Processing ● E-Health, Sensors & Homecare Services ● Smart Grid ● Smart Home Power Management ● Intelligent Transport Systems ● User Centric Networks ● Flexible and Reconfigurable Systems.

9. Analog & Digital Design

● VLSI Circuit Design ● Electronic Testing & Reliability ● Optoelectronic ● Integrated Circuit Design ● Switched Capacitor and Current Mode Circuits ● Time-to-Digital Converters (TDC) ● VLSI Arithmetic Circuits ● Voltage-to-Frequency Converters (VFC) ● Analog, digital, mixed-signal, power and RF ● Application-specific integrated circuit (ASIC) ● Fault Tolerant Circuits ● Frequency-to-Digital Converters (FDC) ● IC Sensors ● Low-Power Low-Voltage IC ● Microprocessors, Microcontrollers and DSPs ● Circuit & system theory
and application ● Optical connectivity ● Electronic connectivity ● ADC, DAC ● Nonlinear Circuits.

10. Communication & big data

● Models and algorithms of Big Data ● Architecture of Big Data ● Big Data Management ● Big Data Analysis and Processing ● Security and Privacy of Big Data ● Big Data in Smart Cities ● Search, Mining and Visualization of Big Data ● Technologies, Services and Application of Big Data ● Edge Computing ● Models, Simulations, Designs, and Paradigms of Cloud Computing ● Technologies, services and Applications of Cloud Computing ● Cooperative Communications,Distributed MIMO and Relaying ● Wireless / Radio Access Technologies ● Mobile Network Applications and Services ● Ad-hoc, Mesh, Machine-to-Machine and Sensor Networks ● Green Communications and Networks.