Special Issue Proposal

Recent Advances in Electrical & Electronic Engineering

Guest Editors
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Proposed Title: Recent Trends in Low-Power VLSI and Embedded System

Scope: Power dissipation is an important factor in the design of CMOS VLSI circuits for battery and externally powered applications in embedded computing. With advances in new capabilities in related domains, new design mechanism has been evolved for ASIC, Semicustom, Custom and other classified design flows along with associated verification process targeting optimized solution on power, performance and area parameters. The advances in low power hardware modeling and design techniques for high performance low power applications has become an important area in VLSI and embedded system. The reduced-swing signaling, clock-powered logic, and stepwise charging techniques are important to design energy-efficient system. The issue special focuses on the design techniques and algorithms that are developed to reduce power consumption.

Target Audience

The target audiences also include the graduate students, PhD scholars, faculty members, and scientists, EDA Designers seeking to carry out research / develop in IC design and software application development for IC design domain covering all steps involved.

Recommended Topics

The proposed book will have following chapters.

- Fundamentals of Low Power Modelling and Design
- Algorithms and Synthesis for Low Power

- Low Power CMOS Design
- Conventional Low Power Techniques
- Contemporary Low Power Design Approaches
- Power Aware Design Paradigm
- Tool Support for Power Aware Designs
- Power Optimization
- Testing Methodologies for Low power IC design and their Advances
- Open Source Tools Assisting Low Power Design
- Case studies

Important Dates

Paper submission deadline	: July 31, 2020
Notification of acceptance	: Aug 31, 2020
Revised submission date	: Sep 15, 2020
Camera ready submission	: Sep 30, 2020

Dr. Mohammad Ayoub Khan received his Ph. D (Computer Engineering) from Jamia Millia Islamia, New Delhi, India and Masters of Technology (Computer Science and Engineering) from Guru Gobind Singh Indraprastha, New Delhi, India. Presently, he is working as Associate Professor at University of Bisha, Saudi Arabia with interests in Internet of Things, RFID, Wireless Sensors Networks, Ad Hoc Network, Smart Cities, Industrial IoT, and signal processing, NFC, Routing in Network-on-Chip, Real Time and Embedded Systems. He has more than 14 years of experience in his research area. He has published many research papers and books in the reputed journals and international IEEE conferences. He is contributing to the research community by various volunteer activities in the capacity of editor for many journals and conference chair. He is a senior member of professional bodies of IEEE, ACM, ISTE and EURASIP society.

Prof Abdul Q Ansari is a Ph.D (Hierarchical Fuzzy Systems) from Jamia Millia Islamia, New Delhi (2000), M. Tech (Integrated Electronics and Circuits) from I.I.T. Delhi (1991), and B. Tech. (Low Current Electrical Engineering) from Aligarh Muslim University, Aligarh (1984). Prof. Ansari is a C. Eng. and Fellow, Institution of Engineers (India); C. Eng. and Fellow, Institution of Electronics and Telecommunication Engineers (IETE), India; C. Eng. and Member, IET, U.K. (formerly IEE U.K.); Fellow, National Telematics Forum, India; Sr. Member, IEEE, U.S.A.; Sr. Member, Computer Society of India (CSI), Life Member, Indian Society for Technical Education (ISTE), Life Member, Indian Science Congress Association and Life Member, National Association of Computer Educators and Trainers (NACET), India. Presently a Professor and Head, Department of Electrical Engineering, Faculty of Engineering and Technology, Jamia Millia Islamia (A Central University, New Delhi – 110025, Prof Ansari has been Head, Dept. of Computer Science, Dean, F/O Management Studies and Information Technology, Jamia Hamdard, New Delhi

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1. **General description of the proposed SI, including the target audience and source(s) of contributions,**
    1. Extended papers will be invited from the http://smartcom2020.com/ to submit for special issue. Also, few papers will be invited through open calls.
    2. The target audience will be industry practitioner and eminent academicians.

2. **Proposed methods of advertising / reaching potential contributors**
    1. Top quality recommended paper from Smart Com 2020
    2. Open call on WikiCFP, Conference alters and other list severs.
    3. Social media and professional network.