Program Chair: Sushmita Mitra
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TRACK:
SIGNALS AND SYSTEMS

Linear and nonlinear, 1D, 2D and multi dimensional signal processing, VLSI, ASIC and FPGAs, communication circuits and systems, Intelligent systems, distributed circuits and systems

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Co-Chair: Debangshu Dey
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TRACK:
CTRL SYSTEMS & APPLICATIONS

Non-linear Control, Stochastic Control, Intelligent control, Iterative learning and Repetitive control, Industrial Control, Applications of Control Theory in various fields.

Track Chair: Madhubanti Maitra
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Co-Chair: Kaushik Das Sharma
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TRACK:
ROBOTICS & MECHATRONICS

Innovations in theoretical robotics, serial and parallel robot design, path planning and control, Autonomous mobile and walking robot design, developments and innovations in robotics, swarm robotics, design and development of robot gripper, Biommetic robot

Track Chair: Ranjit Kumar Barai
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Co-Chair: Pratyusha Rakshit
Jadavpur University
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TRACK:
POWER & ENERGY

- Mini, Micro, Smart and Future Power Grids, Wide Area Monitoring and Control of Power Systems, Power System Economics
- Grid interaction of Renewable Energy Sources, Dielectrics & High Voltage Systems, Energy Storage Systems,
- Modelling, analysis and design of Electrical Machines and Electromagnetic Devices, FACTS Controllers and HVDC Systems
- Power Converters, Power Quality, EMI and EMC issues in Power Electronic Systems, improvement of Power quality etc

Track Chair: Prasid Syam
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Co-Chair: Abhinandan De
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TRACK:
COMPUTATIONAL BIOLOGY AND
BIOMEDICAL INFORMATICS

- Bioinformatics, Immuno-informatics, Metabolomics, Genomics, Proteomics, Transcriptomics.
- Systems Biology, Disease Analysis, Healthcare Informatics, Medical Image Analysis, Bioengineering

Track Chair: Rajat K. De
Indian Statistical Institute
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Co-Chair: Malay Bhattacharyya
Indian Statistical Institute
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TRACK:
MACHINE LEARNING AND DATA ANALYTICS

- Statistical learning, deep learning, ensemble methods, nature inspired learning, learning theory, probabilistic models and transfer learning.
- ML techniques healthcare, manufacturing, retail, education, transportation, and commerce.

Track Chair: Utpal Garain
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email: utpal.garain@gmail.com

Co-Chair: Snehasis Banerjee
TCS Innovation Laboratory
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TRACK: COMMUNICATION SYSTEMS

5G & protocol, Sensors and actuators, IoT, Dynamic sensor networks, Information retrieval using Machine Learning, Vehicle tracking system, Big Data and self-organized networking, Mobile Data analytics, Quantum communication, Cognitive Radio, Radar waveforms for Aerospace system, RF system for wireless applications, 3D Beamforming, antenna & applications, Millimeter wave system design.

Track Chair: Salil Kumar Sanyal
Jadavpur University
email: salilkumarsanyal@yahoo.in

Co-Chair: Sayan Chatterjee
Jadavpur University
email: sayan1234@gmail.com
TRACK: COMPUTATIONAL INTELLIGENCE

To cover different areas of computational intelligence which includes but is not limited to fuzzy systems, evolutionary computation, artificial neural networks, Bayesian learning, support vector machines, self-organizing systems and hybrid intelligence systems.

Track Chair: Paramartha Dutta  
Visva Bharati University  
email: paramartha.dutta@gmail.com

Co-Chair: Anirban Mukhopadhyay  
University of Kalyani  
email: anirban@klyuniv.ac.in
TRACK:
EMERGING TECHNOLOGIES

Nano-electronics, Memristors, MEMS, 3D-IC, Intelligent Hardware and Systems, Automotive Systems, Neuromorphic Computing, Quantum, Computing, Microfluidic Biochips

Track Chair: Bhargab B. Bhattacharya
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Co-Chair: Debasis Mitra
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Dear Colleagues,

The IEEE Region 10 Symposium (IEEE TENSYMP 2019) will be held in Biswa Bangla Convention Centre, Kolkata, India, from June 7 to 9, 2019. TENSYMP is a prestigious technical conference of IEEE Region 10. Paper submission opens on 1st October, 2018 from 10-00 hrs (IST). Prospective authors are invited to submit paper via conference website or by clicking onto the link given below: http://www.ieee.org/10/coverta/tensymp2019/index.html

Prospective authors are invited to submit full paper with four to six pages in double-column IEEE conference format via the conference website. More information about paper format and guidelines for paper submission can be found at the conference website. The conference proceedings will be submitted to the IEEE Xplore digital library.

The paper submission for the conference can be made in the following tracks:

**Track-I: Signals and Systems**
- Linear and nonlinear, 1D, 2D and multi dimensional signal processing, VLSI, ASIC and FPGAs,
- Communication circuits and systems, Intelligent systems, distributed circuits and systems

**Track-II: Control Systems & Applications**
- Non-linear Control, Stochastic Control, Intelligent control, Iterative Learning and Repetitive control, Industrial Control
- Applications of Control Theory in various fields.

**Track-III: Robotics & Mechatronics**
- Innovations in theoretical robotics, serial and parallel robot design, path planning and control, Autonomous mobile and walking robot design, developments and innovations in robotics, swarm robotics, design and development of robot gripper
- Biomimetic robot design and development

**Track-IV: Power & Energy**
- Mini, Micro, Smart and Future Power Grids, Wide Area Monitoring and Control of Power Systems, Power System Economies
- Grid interaction of Renewable Energy Sources, Dielectrics & High Voltage Systems, Energy Storage Systems,
- Modelling, analysis and design of Electrical Machines and Electromagnetic Devices, FACTS Controllers and HVDC Systems
- Power Converters, Power Quality, EMI and EMC issues in Power Electronic Systems, improvement of Power quality etc.

**Track-V: Computational Biology and Biomedical Informatics**
- Bioinformatics, Immuno-Informatics, Metabolomics, Genomics, Proteomics, Transcriptomics,
- Systems Biology, Disease Analysis, Healthcare Informatics, Medical Image Analysis, Bioengineering

**Track-VI: Machine Learning and Data Analytics**
- Statistical learning, deep learning, ensemble methods, nature inspired learning, learning theory, probabilistic models and transfer learning,
- ML techniques, healthcare, manufacturing, retail, education, transportation, and commerce.

**Track-VII: Communication**
- 5G/4G protocol, Sensors and actuators, IoT, Dynamic sensor networks, information retrieval using Machine Learning, Vehicle tracking system, Big Data and self-organized networking, Mobile Data analytics, Quantum communication, Cognitive Radio, Radar waveforms for Aerospace system, RF system for wireless applications, 3D Beamforming, antenna & applications, Millimeter wave system design.

**Track-VIII: Computational Intelligence**
- To cover different areas of computational intelligence which includes but is not limited to fuzzy systems, evolutive computation, artificial neural networks, Bayesian learning, support vector machines, self-organizing systems and hybrid intelligence systems

**Track-IX: Emerging Technologies**
- Nano-electronics, MEMS, MEMS, 3D-IC, Intelligent Hardware and Systems, Automotive Systems, Neuromorphic Computing, Quantum, Computing, Microfluidic Biochips

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- USD 2000
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- USD 1275
- (IEEE Member)
- Student: INR 11000
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