TEQIP Symposia

Topics

1. CMOS Devices and Circuits
2. Signal Processing and Communication
3. Data Science and Machine Learning
4. Infrastructure Development: Safety and Sustainability
5. Electrical Machines and Power Electronics
6. Control Systems and Current Applications

CMOS Devices and Circuits
Prof. Nihar Ranjan Mohapatra and Prof. Joycee Mekie
Dates: 17-18 Oct, 2016

The symposium aims to provide a unique platform to faculty members, industry professionals, and students to learn and share their best research practices in the broad areas of CMOS devices and circuits. The primary objective of this symposium is to gather researchers in a common arena in order to contribute and collaborate for improving the quality of research in India. The main areas of research include but not limited to Modern CMOS Devices, CMOS Technology, CMOS Digital ICs and CMOS Analog ICs. The symposium will feature expert plenary talks and talks by IIT Gandhinagar researchers along with research presentations from all the participants. A round table discussion session will enable the participants to identify common research interests for future research collaborations.

Signal Processing and Communications
Prof. Shanmuganathan Raman & Prof. Nithin V George
Dates: 17-18 Oct, 2016

The symposium aims to provide a unique platform to the faculty members, industry professionals, and students to learn and share their best research practices in the broad areas of Signal Processing and Communications. The primary objective of this symposium is to gather researchers in a common arena in order to contribute and collaborate for improving the quality and atmosphere of research in India. The main areas of research include but not limited to Digital Signal Processing, Image Processing, Wireless Communications, Computer Networks, Computer Vision, Adaptive Signal Processing, Speech Processing, Information Theory, and Wavelets. The symposium will feature expert plenary talks and talks by IIT Gandhinagar researchers along with research presentations from all the participants. A round table discussion session will enable the participants to identify common research interests for future research collaborations.

Data Science and Machine Learning
Prof. Bireswar Das and Prof. Neeldhara Misra
Dates: 24-25 Oct, 2016

Large scale networks are ubiquitous nowadays. A successful management of such networks require deep understanding about behavior of such networks. This symposium aims to bring out fundamental challenges faced in large networks from the perspective of (i) structural impact on usage behavior (ii) obtaining insights about a network by mining usages data. The audience will get a flavor of algorithmic and machine learning techniques to address these challenges.

Infrastructure Development: Safety and Sustainability
Prof. Gaurav Srivastava, Prof. Amit Prashant, Prof. Pranab K. Mohapatra
Dates: 4-5 Nov, 2016

This symposium is intended for faculty members and senior PG students who are concerned about the safety and sustainability of civil infrastructure and want to share some of their exciting work in this area. This will be a platform to share ideas and find active collaborators to strengthen the smart city initiative of the Government of India by taking up research and development activities. Topics related to safety (primarily earthquake and fire) and sustainability (green buildings, food/water security) will be discussed over distributed sessions and plenary talks.

Electrical Machines and Power Electronics
Prof. Ragavan K.
Dates: 4-5 Nov, 2016

The response of an electrical motor can be altered by controlling the electrical excitation. Power electronic converters play the role of regulating the voltage and/or current input to the motor. The theme of this symposium is essentially the role of power electronics to have adjustable electrical drives. This symposium can be attended by the faculty members and Postgraduate students of engineering institutions. Participants are expected to have an exposure to the courses namely Electrical Machines and Power Electronics.

Control Systems and Current Applications
Prof. Harish P. M., Prof. Vineet Vashista
Dates: 26-27 Oct, 2016

The symposium aims to cover a broad range of control system ideas and with particular focus on a few current application areas such as Robotics, Biomechanics and Aerospace. The symposium

will include plenary talks on these application areas, research seminars, networking and discussion sessions that provide an opportunity to discuss research questions. The symposium is designed for both faculty members and postgraduate students with interest in control systems and who are familiar with undergraduate-level control theory and have some familiarity with modern control theory.