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### **Patrons**

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8. Dr. D. Mondal (EE Dept, TISL)
9. Mr. A. K. Dutta (ECE Dept, TISL)
10. Dr. C. K Bhattacharya (CSE Dept, TISL)
11. Mr. P. Sarkar (IT Dept, TISL)
12. Dr. M. Banerjee (BCA-MCA Dept, TISL)
13. Ms. S. Manna (EIE Dept, TISL)

### **Coordinator:**

Ms. Pranati Dutta (EIE, TISL)

### **Technical Coordinator:**

Mr. Subhajit Bhowmick (EIE, TISL)

### **Organizing Committee Members**

1. Mr. Saikat Majumder (EIE, TISL)
2. Mr. Santanu Mondal (EIE, TISL)
3. Mr. Santu Guin (EIE, TISL)
4. Mr. Dibyendu Banerjee (EIE, TISL)
5. Mr. Arnab Karmakar (EIE, TISL)
6. Mr. Apurba Chandra Bag (EIE, TISL)

### **Resource Persons:**

- 1) Dr. Rajarshi Gupta (Applied Physic Dept. , Calcutta University)
- 2) Dr. Madhurima Chattopadhyay (EIE Dept. , HIT KOLKATA)
- 3) Dr. Palash Kumar Kundu (EE Det. , Jadavpur University)
- 4) Dr. Debangshu Dey (EE Dept., Jadavpur University)
- 5) Mr. Susanta RAY (EE Dept., Jadavpur University)
- 6) Mr. Soumitra Sasmal (IT, TISL)
- 7) Mr. Dhruva RAY (ARDENT COMPUTECH PVT. LTD)
- 8) Mr. Debojyoti Chowdhury (AEIE Dept. , HIT KOLKATA)

## **Registration Form**

### **One Week Faculty Development Program on “SENSING BASED IOT & CLOUD COMPUTING”**

Name.....  
(In Block Letters)

Designation .....

Organization.....

Address for Correspondence.....  
.....

Phone .....

E-mail : .....

### **Registration Details**

Amount : ..... Draft No. ....

Issuing Bank with Date .....

Date : \_\_\_\_\_ Signature

Recommendation and forwarding from the Organization.

### **SPONSORSHIP CERTIFICATE**

The applicant is hereby sponsored and will be permitted to attend the above workshop, if selected.

Date : \_\_\_\_\_ Signature and Seal of the Sponsoring Authority

**Note :** Photo copies of this form may also be used for registration. The demand draft for the payment of registration fee should be drawn in favour of “TECHNO INDIA” payable at KOLKATA and to be sent along with duly filled registration form to The co-ordinator, One Week Faculty Development Programme on SENSING BASED IOT AND CLOUD COMPUTING, Techno India, Salt Lake, Sector - V, Kolkata 700 091.

### **One Week Faculty Development Program**

on

### **“SENSING BASED IOT & CLOUD COMPUTING”**

(20<sup>th</sup> to 24<sup>th</sup> December'2016)



Organized by



**EIE Dept.**

**TECHNO INDIA**

EM-4/1, Sec-V, Salt Lake, Kolkata-91

Joint Collaboration

**IET** The Institution of  
Engineering and Technology  
**IET Kolkata Local Network**

Technical Collaboration with



**IEEE Joint CSS-IMS  
Kolkata Chapter**



### **Techno India, Salt Lake**

Techno India is a renowned knowledge management group in Eastern India with a commitment to help young learners with innovative minds. Techno India approved by All India Council for Technical Education (AICTE) and affiliated to Maulana Abul Kalam Azad University of Technology, West Bengal was established in the year 2001 with an aim to emerge as a Center of Excellence in technical education. It possesses a convenient location in the heart of Salt Lake, Sector-V, the IT hub of Eastern India. Since its inception, Techno India has created responsible citizens who have been making their marks in their respective fields. It has been the torch-bearer for nurturing Techno India Group's dream of being a leading institute.

### **About EIE Dept.**

Department of Electronics and Instrumentation Engineering was established in the year 2005. The department offers B. Tech degree in Electronics & Instrumentation Engg. (Total intake: 60). The department is enriched with highly qualified and committed faculty members. It is equipped with excellent infrastructure and state-of-the-art equipment to explore the technological challenges in the areas of electronics, sensors & transducers, instrumentation, signal processing, process control, digital system design, communication, telemetry, optoelectronics etc.

### **IET**

The Institution of Engineering and Technology, earlier known as The Institution of Electrical Engineers, is one of the world's leading professional societies for the engineering and technology community. The IET provides a global knowledge network to facilitate the exchange of ideas and promote the positive role of science, engineering and technology worldwide. The IET has more than 150,000 members in 127 countries and offices in Europe, North America and Asia-Pacific. The Kolkata Network of IET is the oldest in India, dating back to 1944 when good number of British Engineers had taken initiative to form the then Calcutta Centre of The Institution of Electrical Engineers.

### **IEEE CSS-IMS Kolkata Chapter**

The geographical area under the jurisdiction of IEEE Kolkata Section has several active groups in both the areas of Control Systems and Instrumentation and Measurement. In engineering domain and in industrial applications, Control and Instrumentation are very much interrelated and interweaved activities which motivated us to form this joint chapter. Several of these group members are IEEE members and some of them

regularly publish in IEEE Transactions in the areas of Control and Instrumentation and Measurement. It had been a long standing wish of these members to form a joint IEEE CSS-IMS chapter and come together under the joint umbrella of IEEE CSS and IEEE IMS. Eventually, the joint IEEE Control Systems Society and Instrumentation & Measurement Society Chapter, IEEE Kolkata Section was formed in 2014. This chapter provides and will continue to provide a platform for regular, close knit interactions among academicians, researchers, and practicing engineers.

### **About the workshop:**

Internet of Things is a term given to the attempt of connecting objects to the internet and to each other – allowing people and objects themselves to analyze data from various sources in real-time and take necessary actions in an intelligent fashion and resulting in improved efficiency, accuracy and economic benefit. When IOT is augmented with sensors and actuators the technology becomes an instance of the more general class of cyber-physical systems, which also encompasses technologies such as smart grids, smart homes, intelligent transportation and smart cities.

### **Objective:**

This workshop will provide power packed training on how to implement and use the microcontrollers for various applications including IOT. The workshop focuses on to provide hands on experience to interface the objects for different application domains using the Arduino kit with devices such as sensors and actuators. Also enables the participants to connect the Arduino device to cloud using Raspberry Pi.

### **Workshop coverage:**

- Introduction to Internet of Things
- Basic python introduction
- Cloud computing
- Python script development
- Introduction to App builder
- Control and connect via Apps.
- Wireless sensor networks.
- Arduino programming
- Sensors & Sensors Data Management

### **Tentative Program Schedule:**

#### **Day 1(20<sup>th</sup> Nov'16):**

1<sup>st</sup> Session: Sensing based IOT in health sector.

2<sup>nd</sup> Session: Introduction of Embedded System and IOT based cloud computing

#### **Day2 (21<sup>st</sup> Nov'16):**

1<sup>st</sup> Session: Introduction of Raspberry Pi

2<sup>nd</sup> Session: Sensing based IOT using Raspberry Pi (Hands-on)

#### **Day3 (22<sup>nd</sup> Nov'16):**

Sensing based IOT using Raspberry Pi (Hands-on)

Day 4 (23<sup>rd</sup> Nov'16):

Advance ATMEGA328 programming (Based on Arduino UNO R3, Hands-on)

#### **Day 5 (24<sup>th</sup> Nov'16):**

Python language programming

### **Registration Fees:**

Techno India Group	: Rs.1000/-
IET MEMBER	: Rs.1200/-
Others	: Rs.1500/-

### **Sponsorship:**

- Title Sponsorship Rs. 25,000/-
- Advertising (Stall) Rs. 20,000/-
- Co- Sponsorship Rs. 15,000/-
- Advertising (Video) Rs. 10,000/-
- Banner Display Rs. 5,000/-

### **How to apply:**

Interested persons are required to fill in the attached Application Form and send it to the Coordinator. Photo copies of the form are acceptable. Application can also be made via e-mail, but the filled-in original duly filled **Application Form** must be submitted during the FDP.

### **Eligibility:**

Faculty members and technical support staffs of different AICTE approved engineering colleges. Researchers and industry persons are also eligible.

### **Contact Person:**

Ms. Pranati Dutta (Co-ordinator)

Mobile no. +91 9732730836

Mail-id: pranati991@gmail.com

### **Important dates:**

Last date of registration: 10<sup>th</sup> Dec'16

### **Inauguration:**

9:30am on 20<sup>th</sup> Dec'16



**One Week Faculty Development Program**  
**ON**  
**“SENSING BASED IOT & CLOUD COMPUTING”**  
**Organized by**

**EIE Dept.**

**TECHNO INDIA**

EM-4/1, Sec-V, Salt Lake, Kolkata-91

**Duration : 20<sup>th</sup> to 24<sup>th</sup> December'2016**

**REGISTRATION FORM**

Attach recent color  
passport size photo  
3.5 cm X 3.5 cm

1. Name : .....
2. Institution : .....  
(Attach Identity Proof)
3. Designation : .....
4. Postal Address : .....  
.....  
..... STATE : ..... PIN : .....
5. Phone (Mob.) : ..... Phone (Resi.) : .....  
E-mail (Compulsory) : .....
6. Gender (Male / Female) : .....
7. Date of Birth : .....
8. Veg. / Non Veg. : .....
9. Highest Academic Qualifications: .....
10. Demand Draft/ Cheque No.: \_\_\_\_\_, Dated: \_\_\_ / \_\_\_ / 2016,  
drawn on \_\_\_\_\_ (Bank) in favour of  
“TECHNO INDIA” payable at Kolkata.

Date :

*Signature and Seal of the Principal /  
Head of the Dept. of the Organization.*

Date :

Place :

\_\_\_\_\_  
*Signature of the Applicant.*