



Department of Computer Science and Engineering

Jaypee Institute of Information Technology, Noida



## Two-Weeks Summer School

on

### Intelligent Internet of Things (IIoT)

24<sup>th</sup> June – 06<sup>th</sup> July, 2019

*(Technically Co-Sponsored by IEEE UP Section)*

The convergence of information and telecommunication technologies in the last few decades has led to the evolution of industries from simply creating products, to create networks of products viz. Internet of Things, to eventually creating intelligent networks of products (I-IoT). The varying nature of devices, organizations, and social structures involved in the IoT derive the need for intelligent and automated approaches to support decision makers to gain more insights which are enabled through Artificial Intelligence. This convergence is not accidental but is an inexorable necessity nearly designed by default. Artificial Intelligence (AI) needs data, Internet of Things (IoT) needs intelligence and insights, and both need security and transparent marketplaces which are attained through Block chain technology. The magnitude of this convergence is so high that it is affecting every field which is historically data-rich but information-poor swinging from energy and manufacturing to home environment, robotics and drones, supply chain, logistics, transportation, healthcare, agriculture, manufacturing, smart city, and many more. This summer school aims to educate and provide a forum for exchanging ideas and information on current research studies, challenges, system developments, and practical experiences related to IoT platforms, Data Analysis, Machine Learning, Programming Environments, Intelligent Discovery of devices and Data/Information, aggregation of Information from Networks, Intelligent Privacy and Security of networks, etc to make Intelligent IoT.

### ABOUT US

Jaypee Institute of Information Technology (JIIT), Noida was established in the year 2001 and has been declared as a “Deemed to be University” under Section 3 of UGC Act 1956. The university is accredited by the National Assessment and Accreditation Council (NAAC) of the UGC, recognised by the All India Council of Technical Education (AICTE) and listed in NIRF (MHRD) engineering category ranking 2016, 2017, 2018 and 2019. JIIT’s state-of-the-art & environmentally conditioned campus comprises smart buildings with Wi-Fi connectivity covering the Academic Block, Business School cum Research Block, Faculty Residences, Student Hostels and Annapurna. Well-equipped modern laboratories and an intellectually stocked Learning Resource Centre provide a pleasant and stimulating academic ambience. For more info visit: <http://www.jiit.ac.in>

### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING / IT

The Department of Computer Science & Engineering and Information Technology is a center of excellence that provides high quality education to develop future leaders in all aspects of computing including education and entrepreneurship, contributes practically relevant and cutting edge research, and catalyzes IT entrepreneurship. It offers 3 undergraduate and 5 post graduate Engineering as well doctorate programmes. Currently under graduate, post graduate, and doctorate students are actively engaged in frontier research domains of IT.

### RESOURCE PERSONS

Eminent academicians affiliated to IIT, IIIT, JNU, South Asian University, Ashoka University, Bennett University, JIIT, and Industry experts will deliver the sessions with practical demonstrations & Hands on in a dedicated IoT Laboratory.

## PROGRAMME HIGHLIGHTS

Following areas would be focused in the Summer School

- *Frontiers in IOT*
- *IOT implementations models and frameworks*
- *IOT Platforms*
- *Computer and Devices Technologies for IoT*
- *Ontologies describing IoT devices and their use*
- *Big data and IoT Data Analytics*
- *Knowledge-based policy management and reasoning for the IoT*
- *Provenance and usage in the IoT*
- *Modeling and evaluating quality in IoT*
- Communication transparency in IoT

## WHO CAN PARTICIPATE

The program is open for all the faculty members, research scholars and graduate and post graduate scholars working with the Engineering Institution in the INDIA.

## HOW TO APPLY?

To register for this Summer School, the applicant is required to fill in registration information online at <http://bit.do/iit2019> before registration deadlines.

Last date of submission of application form: ~~5<sup>th</sup> June 2019~~ **20<sup>th</sup> June 2019**

Display list of selected participants: ~~10<sup>th</sup> June 2019~~ **21<sup>st</sup> June 2019**

Registration Fee

Industry Personnel            INR 6000/-

Academician                    INR 4000/-

Scholar                            INR 2000/-

Internal Faculty                No Fee

For IEEE Members : Discount of INR 500/-

The applicant need to pay the registration fee through NEFT and the transaction details should be mentioned in the Google form. The NEFT transaction is done using the beneficiary using details:

Beneficiary Account Name: Jaypee Institute of Information Technology.

Account number: 910010050443719; Bank Name: AXIS bank

IFSC-Code: UTIB0000372

Bank Address: Axis Bank Ltd. Karkardooma, New Delhi-110092

**Accommodation (Twin Sharing):** AC Room (at JIIT62)- INR 200/Day  
Non-AC Room (at J128)-Free of cost

## CHIEF PATRONS

Hon'ble Shri Jaiprakash Gaur Ji

Hon'ble Shri Manoj Gaur Ji

## PATRONS

Prof. S.C. Saxena, Vice Chancellor, JIIT

Prof. Hariom Gupta, Director, JIIT 128

## ADVISORY SUPPORT

Prof. Asheesh Kumar, Chairperson, IEEE UP Section

Prof. Prabhakar Tiwari, Joint Secretary, IEEE UP Section

Prof. Kumar Vaibhav Srivastava, IIT Kanpur

Prof. V.K. Dwivedi, Director, GCET, Gr. Noida

Prof. D. K. Rai, DEAN (A&R), JIIT NOIDA ,

Prof. Vikas Saxena, HoD- CSE/IT, JIIT NOIDA

Dr. Diwakar Yadav, MMMUT, Gorakhpur

Dr. Hema Banati, Delhi University

Dr. Shelly Sachdeva, NIT Delhi

## CONVENORS

Dr. Krishna Asawa (M) 9811445710

Dr. Shikha Mehta (M) 9871486192

Dr. Neeraj Jain (M) 7389973867

## ORGANIZING SUPPORT

Dr. Neha, Dr. Shailesh, Dr. Ashish, Mr. Shariq

Ms. Akanksha, Ms. Anuradha, Ms. Vartika

Mr. H Aggrawal., Mr. H Mittal., Mr. Raju Pal

## VENUE

Jaypee Institute of Information Technology

Within Jaypee Green Wish Town

Sector -128, PIN 201304, Noida

## HOW TO REACH

**Metro:** The station closest to the Sector 128, Noida campus of the JIIT is Noida City Center/ Okhala Bird Sanctuary/ Sector-83. Autos and Cabs are available from there.

**Railway Station:** Hazarat Nizamuddin, New Delhi Railway Station and Old Delhi Railway Station connect Noida to the Indian Railway Network.

## For any query kindly contact:

**Ms. Vartika Puri** @ [vartika.puri@jiit.ac.in](mailto:vartika.puri@jiit.ac.in) (M) 9560430101

Department of Computer Science & Engineering, JIIT128, NOIDA

**Department of Computer Science and Engineering**  
**Jaypee Institute of Information Technology, Sector 128 Campus, Noida**

**Tentative Programme Schedule**

Summer School on Intelligent Internet of Things (IIoT), 24<sup>th</sup> June – 6<sup>th</sup> July, 2019

(Technically Sponsored by IEEE UP Section)

<b>DAY 1 - June 24<sup>th</sup>, 2019</b>	
09:30-10:00	Registration
10:00-10:30	Inaugural Ceremony
10:30-11:00	High Tea
11:00-12:30	Real World IOT: Prof. Ravi Kothari, Ashoka University, Sonapat
12:30-13:30	Lunch
13:30-15:30	Applying IOT for Real World Problems by Mr. Rasik Pansare, Co-founder & CMO, Getmyparking.com + Lab Visit
15:30-15:40	Tea
<b>DAY 2 - June 25<sup>th</sup>, 2019</b>	
10:00-11:00	IOT Implementations Models and Frameworks :Dr. Gaurav Singhal, Bennett University, Greater Noida.
11:00-11:30	High Tea
11:30-12:30	IOT Implementations Models and Frameworks : Dr. Gaurav Singhal, Bennett University, Greater Noida.
12:30-13:30	Lunch
13:30-15:30	LAB SESSION ON - Tools for IOT: Dr. Gaurav Singhal, Bennett University, Greater Noida.
15:30-15:40	Tea
<b>DAY 3 - June 26<sup>th</sup>, 2019</b>	
10:00-11:00	Frontier in IOT- A practical approach in design and development: Dr. S.R.N Reddy, ETI Labs
11:00-11:30	High Tea
11:30-12:30	Frontier in IOT- A practical approach in design and development: Dr. S.R.N Reddy, ETI Labs
12:30-13:30	Lunch
13:30-15:30	LAB SESSION ON - Frontier in IOT: Dr. S.R.N Reddy, ETI Labs
15:30-15:40	Tea
<b>DAY 4 - June 27<sup>th</sup>, 2019</b>	
10:00-11:00	IOT and Cloud Data Management: Dr. D P Vidyarthi, JNU, New Delhi
11:00-11:30	High Tea
11:30-12:30	IOT Application Development using Rasberry Pi: Mr. Vijay Kumar Yadav, DyfoLabs
12:30-13:30	Lunch
13:30-15:30	LAB SESSION ON - IOT Application Development using Rasberry Pi: Mr. Vijay Kumar Yadav, DyfoLabs
15:30-15:40	Tea
<b>DAY 5 - June 28<sup>th</sup>, 2019</b>	
10:00-11:00	Knowledge-based Policy Management and Reasoning for the IoT: Prof. Krishna Asawa, JIIT, Noida.
11:00-11:30	High Tea
11:30-12:30	Communication Transparency in IoT: Dr. Monali, JIIT, Noida.
12:30-13:30	Lunch
13:30-15:30	LAB SESSION ON - Communication Transparency in IoT: Dr. Monali, JIIT, Noida.
15:30-15:40	Tea
<b>DAY 6 - June 29<sup>th</sup>, 2019</b>	
10:00-11:00	Low Weight Technology in IOT: Mr. Vijay Kumar Yadav, DyfoLabs
11:00-11:30	High Tea
11:30-12:30	Low Weight Technology in IOT: Mr. Vijay Kumar Yadav, DyfoLabs
12:30-13:30	Lunch

**VENUE : CR-60, JIIT-128 Campus, Jaypee Wish Town, Sector 128, NOIDA**

Contact @: Prof. Krishna Asawa, Convener (IIOT)-9811445710

Dr. Shikha Mehta , Convener (IIOT)-9871486192, Dr. Neeraj Jain, Convener (IIOT)-7389973867

<b>DAY 7 - July 1st, 2019</b>	
10:00-11:00	IOT Data Analytics (Machine Learning): Dr. Tanveer Ahmad, Bennett University, Greater Noida.
11:00-11:30	High Tea
11:30-12:30	IOT Data Analytics (Machine Learning): Dr. Tanveer Ahmad, Bennett University, Greater Noida.
12:30-13:30	Lunch
13:30-15:30	LAB SESSION ON - IOT Data Analytics: Dr. Tanveer Ahmad, Bennett University, Greater Noida.
15:30-15:40	Tea
<b>DAY 8 - July 2nd, 2019</b>	
10:00-11:00	Intelligent Discovery of Devices, Data and Services in the IoT : Dr. Shachi Sharma, IIIT, Delhi
11:00-11:30	High Tea
11:30-12:30	IOT Security and Block Chain: Mr. Pawan Kumar, CISCO
12:30-13:30	Lunch
13:30-15:30	LAB SESSION ON - IOT Data Analytics: Dr. Neeraj Jain, IIIT, Noida
15:30-15:40	Tea
<b>DAY 9 - July 3rd, 2019</b>	
10:00-11:00	IOT Security: Dr. Rahul Johri, (USI,C&T), GGSIU, Delhi
11:00-11:30	High Tea
11:30-12:30	IOT Security: Dr. Rahul Johri, (USI,C&T), GGSIU, Delhi
12:30-13:30	Lunch
13:30-15:30	LAB SESSION ON - IOT Security: Dr. Rahul Johri, (USI,C&T), GGSIU, Delhi
15:30-15:40	Tea
<b>DAY 10 - July 4th, 2019</b>	
10:00-11:00	IoT in Agricultural Applications: Dr. Hema N, IIIT, Noida
11:00-11:30	High Tea
11:30-12:30	IoT in Agricultural Applications: Dr. Hema N, IIIT, Noida
12:30-13:30	Lunch
13:30-15:30	LAB SESSION ON - Gathering and Analysis of Climatic Data for Agricultural Application: Dr. Hema N, IIIT, Noida
15:30-15:40	Tea
<b>DAY 11 - July 5th, 2019</b>	
10:00-11:00	PROJECT ON - IOT Data Analytics
11:00-11:30	High Tea
11:30-12:30	PROJECT ON - IOT Data Analytics
12:30-13:30	Lunch
13:30-15:30	PROJECT ON - IOT Data Analytics
15:30-15:40	Tea
<b>DAY 12 - July 6th, 2019</b>	
10:00-11:00	Project Demonstration
11:00-11:30	High Tea
11:30-12:30	Valedictory
12:30-13:30	Lunch

**VENUE : CR-60, IIIT-128 Campus, Jaypee Wish Town, Sector 128, NOIDA**

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