

Department of Computer Science and Engineering



Jaypee Institute of Information Technology, Noida

Two-Weeks Summer School

on

Intelligent Internet of Things (IIoT) 24th June - 06th 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 ENGINNERING/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/iiot2019 before registration deadlines.

Last date of submission of application form: 5th June 2019 21th June 2019

Display list of selected participants: 10th June 2019 22th June 2019

Registration Fee

Industry Personnel INR 6000/-INR 4000/-Academician 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 Metro: The station closest to the Sector 128, Noida campus of the JIIT is Noida City 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

ORGANIZING SUPPORT

Dr. Krishna Asawa (M) 9811445710 Dr. Neha, Dr. Shailesh, Dr. Ashish, Mr. Shariq Dr. Shikha Mehta (M) 9871486192 Ms. Akanksha, Ms. Anuradha, Ms. Vartika

(M) 7389973867 Mr. H Aggrawal., Mr. H Mittal., Mr. Raju Pal Dr. Neeraj Jain

VENUE

Jaypee Institute of Information Technology Within Jaypee Green Wish Town Sector -128, PIN 201304, Noida

HOW TO REACH

Center/ Okhala Bird Sanchury/ 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 (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), 24th June – 6th July, 2019

(Technically Sponsored by IEEE UP Section)

DAY 1 - June 24 th , 2019		
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, Sonepat	
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	
DAY 2 - June 25th, 2019		
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	
DAY 3 - June 26th, 2019		
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	
DAY 4 - June 27th, 2019		
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 Aplication Development using Rasberry Pi: Mr. Vijay Kumar Yadav, DyfoLabs	
15:30-15:40	Tea	
DAY 5 - June 28th, 2019		
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	
DAY 6 - June 29th, 2019		
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	

DAY 7 - July 1st, 2019		
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	
DAY 8 - July 2nd, 2019		
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, JIIT, Noida	
15:30-15:40	Tea	
DAY 9 - July 3rd, 2019		
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	
DAY 10 - July 4th, 2019		
10:00-11:00	IoT in Agricultural Applications: Dr. Hema N, JIIT, Noida	
11:00-11:30	High Tea	
11:30-12:30	IoT in Agricultural Applications: Dr. Hema N, JIIT, 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, JIIT, Noida	
15:30-15:40	Tea	
DAY 11 - July 5th, 2019		
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	
DAY 12 - July 6th, 2019		
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, JIIT-128 Campus, Jaypee Wish Town, Sector 128, NOIDA