One week online Short Term course on
Artificial Intelligence enabled Internet of Things and its applications
-Theory and Practice
(30th May-3rd June 2022)
Organised by
Center for Continuing Education, NIT-WARANGAL
In association with
SREENIDHI INSTITUTE OF SCIENCE AND TECHNOLOGY, HYDERABAD
(Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI)

Preamble:

Center for Continuing Education:
The Center for Continuing Education NIT Warangal organizes FDPs/ Training programmers/ Seminars/ Workshops etc., in the frontier areas of Science, Engineering, Technology, and Management, Humanities, Social Science and Socially relevant themes on self-financing basis in three different modes at NIT Warangal, at NIT Warangal in collaboration with other organizations and By NIT Warangal Faculty at the Host Organization/ Institute.

About STC

Artificial Intelligence has become the driving Force of Industry 4.0 (the Industrial Internet of Things (IIoT)) which is the industry revolution that focuses heavily on interconnectivity, automation, machine learning, and real-time data. This short term course will help to disseminate the knowledge in the domain of Electronics and Communication Engineering and to provide a platform to faculty, students, research scholars, industry participants to explore the most promising technologies i.e. Artificial Intelligence, Internet of Things, wireless sensor networks and their integration for a variety of applications like intelligent appliances, smart homes, smart grids, smart cities, autonomous security systems and so on. This course is aimed to provide the hands-on practice to all the participants with open source tools covering the working with wireless sensor networks and the programming of the same for wireless connectivity using Internet of Things. The workshop is structured and tailored to meet the needs of participants to get a very good exposure to Artificial Intelligence enabled IoT technology.

The outcomes of this course are as follows:

- Learning Basic Building Blocks of Internet of Things
- Understanding the importance of AI and challenges in AI-enabled IoT applications
- Understanding IoT architecture and challenges in IoT system implementation
- Understanding Hardware, Sensors and Actuators for IoT applications
- Exploring IoT communication with web based services
- Creating WSN architecture for IOT applications
- Designing different case studies with open source software packages.
- Demonstrating case studies in the field of WSN and IoT.

Major Course Contents:

- Concepts of AI enabled IoT and Industry 4.0
- IoT architecture and challenges in IoT
- AI enabled Internet of Things and challenges
- IoT sensors and Actuators
- Communication Technologies for IoT
- LoWPAN Technologies
- LoRaWAN architecture and applications
- WSN Architectures and its deployment for IoT applications
- Open Source WSN Operating System for IoT
- Hands on experience with Case studies

Resource persons for this Program:

The course will be conducted and organized by the faculty members from NIT Warangal and SNIST, Hyderabad. Academicians in the concerned field from IITs/NITs/IIITs/Central/Deemed/State Universities are invited to deliver lectures in the programme. Experts from relevant industries are also identified to deliver as a part of the course.

NIT-Warangal:

National Institute of Technology, Warangal is the first among 17 RECs setup as joint venture of the Government of India and the state government. Over the years the college has established itself as a premier institute imparting technical education of a very high standard leading to the B.Tech degrees in various branches of engineering, M.Tech. and Ph.D programmes in various specializations. All B. Tech and M. Tech programmes of NIT Warangal are NBA accredited.

Sreenidhi Institute of Science and Technology, Hyderabad:

Sreenidhi Institute of Science and Technology (SNIST), Hyderabad, Telangana 501301 is a non-profit organization founded by a group of Industrialists, Academicians, Professionals and non-resident Indians with an idea of imparting purposeful education to youth. SNIST which is being sponsored by Sree Educational Group was established in the year 1997 by Dr. K.T. Mahhe, an extraordinary educationist, a pragmatic leader and a dynamic entrepreneur with rich experience in Academics and Industry with the permission of AICTE, New Delhi and the Government of Andhra Pradesh. The Institute offers 11 UG (B.Tech) and 9 PG (M.Tech and MBA) programs. SNIST is striving hard to empower the students in their technical knowledge and imbibe adequate skills through the teaching by eminent faculty. The present annual intake of the institute is 1836. The institution has been accredited by NAAC with A^+ grade and NBA, New Delhi. This year SNIST is celebrating its 25th year (Silver Jubilee).

About ECE Department, SNIST

The Department of ECE was started in 1997 with an intake of 60 students; intake was continuously enhanced and reached to 420 in 2014. Under ECE department, the PG Program in M.Tech (DSCE) was started in the year 2004. ECE department is enriched with 27 Ph.D holders and 22 more faculty are pursuing Ph.D work of which 4 faculty are awaiting for viva voce examination. The department has been recognised as JNTUH Research centre in 2019.

The department has received R&D project grants from UGC, DRDO, RCI, TS-COST, JNTUH etc of worth Rs. 53.62 Lakhs and got the grants from AICTE for FDP, MODROBS of Rs. 38.98 Lakhs in last 4 years. The department is currently carrying out the consultancy work for Nucleonix, Next-Gen-IT solutions, and Smart Bridge for a grant of 10.22 Lakhs

- Industry Sponsored Labs- Texas Instruments, Xilinx University Program, ARM University Program
- Centre of excellence in IoT and Communication
- Dept has NPTEL local chapter, CISCO Networking Academy, MICROCHIP Academy and IIRS Outreach Programme.
- Department has Sree SAT, Electronix and START Clubs
- MoU with IBM, SAP, Kushaiguda, Nacharam, Uppal, Mallapur Industrial Associations, Speck Systems, RTTC BSNL and many more
- 100% admissions, Average CGPA is 8 and Placement is 70%

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Name:	**Registration Fee Particulars:**
Designation:	Students, Faculty and Research Scholars: INR 500 Industry Participants: INR 1000 Participants need to pay the Registration Fee Online using the following details Account Name: Center for continuing Education (NITW) Account No: 62403680215; IFSC: SBIN0020149 Bank and Branch: State Bank of India, NIT (REC) Warangal
Institution:	
E-mail:	
Mobile No.:	
Reference No. (fee paid):	
Mode of Payment:	**How to Apply:**
	Participants are required to fill the online registration form by clicking on the following link:
Amount paid:	**Step 1: Register for the Course:**
	https://forms.gle/GKhWj45dULT2e5EC8
Name of the Bank:	
	Step 2: Join in WhatsApp Group:
Date of Payment:	https://chat.whatsapp.com/BDrqrZZdM5b8c1hQgakfd5
	Selection Criteria:
Address for Correspondence:	
	Selection will be done based on first-come-first-serve basis to a maximum number of 30 (Thirty). Additionally, 5 participants from industry are allowed to participate. The list of selected participants will be intimated through e-mail. In case a candidate is not selected, the DD will be sent back. Candidates will be issued satisfactory certificates on successful completion of the course. Reservations are followed for selecting candidates as per GOI norms.
Educational Qualification:	
Subjects taught so far:	
	Important Dates:
No. of refresher courses/workshop attended:	
	Last Date (Application &DD): 28th May 2022
Experience in Teaching:	Selection List (by e-mail): 29th May 2022
	Duration: 30th May-3rd June, 2022
Research: Industry:	
	Note:
Do you belong to SC/ST: Yes/No	
	It is requested to all the delegates, after completion of application form, all the payment details, screenshot of the payment and scanned application form has to be uploaded in the following online registration link.
Declaration:	
	For more details about Center for Continuing Education, NIT, Warangal, please visit: https://nitw.ac.in
The information provided is true to the best of my knowledge. If selected, I agree to abide by the rules and regulations of the FDP and shall attend the course for entire duration. I also undertake the responsibility of the course.	
Signature of the Participant	
Sponsorship Certificate:	**Coordinators:**
Dr. /Mr. /Ms. ..... is an employee of our Institute/Organization and is hereby sponsored to participate in the One Week Online STC on **"Artificial Intelligence enabled Internet of Things and its applications-Theory and Practice"** sponsored by Electronics & ICT Academy of National Institute of Technology, Warangal in association with Sreenidhi Institute of Science and Technology, Hyderabad during **30th May-3rd June 2022** Signature of Head of the institution/Organization (with seal)	**Dr. V. Kumara Swamy** Associate Dean (Academics), Department of ECE, Sreenidhi Institute of Science and Technology, Hyderabad Email id: kumaraswamyv@sreenidhi.edu.in; Mobile : 9000537597 **Dr. G. Prasad Acharya** Assoc Head, Dept of ECE Sreenidhi Institute of Science and Technology, Hyderabad Email id: gpacharya@sreenidhi.edu.in; Mobile: 9849937691 **Dr. T. Kishore Kumar**, Professor of ECE National Institute of Technology, Warangal Email id: kishoret@nitw.ac.in; Mobile :8332969353