Report on One-week STC Program on" IoTs and Sensor Networks (ICT-94)"
(Department of Electrical Engineering Under the Aegis of HRDC, Integral University, Lucknow, Remote Center of NITTTR, Chandigarh)
09-13 October 2023

Department of Electrical Engineering, Under the Aegis of Human Resource Development Centre, Integral University, Lucknow, as a remote Centre of National Institute of Technical Teachers Training & Research (NITTTR), Chandigarh has organized AICTE Recognized Short Term Course through Information and Communication Technology (ICT) on **"IoTs and Sensor Networks (ICT-94)"** from **09-13 October 2023** at Integral University, Lucknow. The National Institute of Technical Teachers Training & Research (NITTTR), Chandigarh organizes Short Term Courses under the Ministry of Education, Government of India.

As an outcome this Short Term Course would be proved fruitful for the faculty members, research scholars and students as very informative and latest trends lectures were delivered by well experienced and talented speakers. A total of fifteen technical sessions were constituted from a wide variety of topics and each session was led by a team of expert's viz.:

Day 1:
- **Session 1:** "IoT Fundamentals and Concepts" by Dr. Kanika Sharma, Course Coordinator, NITTTR, Chandigarh.
- **Session 2:** "Sensor Networks: Routing Techniques and Algorithms" by Dr. Kanika Sharma, Course Coordinator, NITTTR, Chandigarh.
- **Session 3:** Assignments and Summarizing session was being conducted.

Day 2:
- **Session 1:** "IoT Enabled Smart Sensors for Water Quality Monitoring" by Dr. Sadanand Mishra, Principal Scientist, CSIR-AMPRI, Bhopal, Specialization in Sensor development, water resources management. Al etc.
- **Session 2:** "Role of AI in Water Quality Management System" by Dr. Satanand Mishra, Principal Scientist, CSIR-AMPRI, Bhopal, Specialization in Sensor development, water resources management. Al etc.
- **Session 3:** Assignments and Practice session was being conducted. ·

Day 3:
- **Session 1:** "Multi-Path Data Transmission Algorithms" by Dr. Dilip Kumar, SLIET, Specialization in Advanced Computing, Wireless Sensor Networks
- **Session 2:** "Meta Heuristic Approaches in Sensor Networks" by Dr. Dilip Kumar, SLIET, Specialization in Advanced Computing, Wireless Sensor Networks
- **Session 3:** "ZIGBEE IEEE 802.15.2" by Dr. Kanika Sharma, Course Coordinator, NITTTR, Chandigarh

Day 4:

- **Session 1:** "Designing of Algorithms using MATLAB" by Dr. Sandeep Verma, IIT Delhi, Specialization in Wireless Communication, Wireless Sensor Networks, SG Communication
  Session 2: "Optimization Algorithms for Sensor Networks" by Dr. Sandeep Verma, IIT Delhi, Specialization in Wireless Communication, Wireless Sensor Networks, SG Communication
- **Session 3:** "Quiz on IoT and Sensor Networks" by Dr. Kanika Sharma, Course Coordinator, NITTTR, Chandigarh

Day 5:

- **Session 1:** "IoT, Cloud and Data Analytics for Precision Agriculture Farming and Water Management" by Dr. Baban Kumar, Senior Scientist, CSIO. Specialization in IoT Applications for Soil,Water and Air Quality Management, Sensors and Instrumentation, Embedded Systems
- **Session 2:** "IoRT" by Dr. Kuldeep S. Nagla, NIT Jalandhar. Specialization in Space Robotics, ArtificialSensor Fusion, etc.
- **Session 3:** "Discussion, Feedback and Valediction" by Dr. Kanika Sharma, Course Coordinator, NITTTR, Chandigarh

Glimpses of the Event:

Lucknow,UP,India
Bakshi Ka Talab, Lucknow, 226026, UP, India
Lat 26.957764, Long 80.999874
10/10/2023 11:38 AM GMT+05:30

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13/10/23 03:12 PM GMT +05:30