

Target Audience

Faculty of any discipline from Engineering Colleges and Engineers from Industries.

Resource Persons

Domain experts from M/s. STEPS Knowledge Services Pvt. Ltd., Coimbatore-Channel partners of Texas Instruments, USA.

Registration Details:

- Academicians : ● Exempted from Registration Fee.
● Limited to two participants per institution.
● Maximum number of external participants is 40.
● Early bird registrations are welcome.
- Industry Delegates : Rs. 5000/- head, Rs. 8000/- for two persons
- Important Dates : Last Date for Registration : 10.07.2018
Programme Duration : 17.07.2018 to 20.07.2018
- For Registrations
E-mail to : ahalia.eee@gmail.com /
hodeee.aset@ahalia.edu.in or www.ahalia.ac.in
- Convenors : **Dr. G Murugananth**, HoD/EEE
Mr. A Manickavasagam, AP/EEE
- Coordinators : **Mr. Midhun Murali**, AP/EEE
Ms. R. Swetha, AP/EEE
Mr. T. Arun Raj, AP/EEE
Department of EEE,
Ahalia School of Engineering and Technology,
Kozhipara, Palakkad - 678557
Mail id: ahalia.eee@gmail.com
www.ahalia.ac.in
Phone : +91-4923-226666
Mobile : +91-94475 30914
+91-82899 15099
+91-90482 21454



(ISO 9001:2015 Certified Institution)

(Approved by AICTE & Affiliated to A.P.J. Abdul Kalam Technological University)

Ahalia Health, Heritage & Knowledge Village, Palakkad - 678557

Phone : 04923-226666 www.ahalia.ac.in

Four Day Faculty Empowerment Programme on "Internet of Things (IoT) and Robotics"

17/07/2018 to 20/07/2018

Organized by

Department of Electrical and Electronics Engineering
Ahalia School of Engineering and Technology
Palakkad - 678 557.

In association with



University Program Partner of



TI university program

Ahalia Health, Heritage and Knowledge Village

Ahalia Health, Heritage & Knowledge Village is a blossoming healthcare & knowledge campus, a division of Ahalia International Foundation, in which health care goes beyond its figurative meaning. In the valleys of Western Ghats, Ahalia Health, Heritage & Knowledge Village is situated in the splendour of greenery of Palakkad. The campus brings international standards of various disciplines in healthcare & education, consisting of Ahalia Foundation Eye Hospital (AFEH), Ahalia Ayurvedic Medical College and Hospital (AAMCH), Ahalia Diabetes Hospital (ADH), Ahalia Women and Children's Hospital (AWACH), Ahalia School of Engineering and Technology (ASET), Ahalia School of Management (ASM), Ahalia School of Pharmacy (ASP), Ahalia Public School (APS), Ahalia School of Optometry (ASO), Ahalia School of Paramedical Sciences (ASPS), Ahalia Heritage Village and Ahalia Children's Village.

Ahalia School of Engineering and Technology

Ahalia School of Engineering and Technology (ASET) provides world-class technical education and training in the fields of Engineering and Technology to meritorious students from diverse socio-economic backgrounds. The college, located in a lush green campus with a beautiful view of the Western Ghats, provides a peaceful and congenial atmosphere, which is ideal for student's holistic development. Ahalia School of Engineering and Technology offers five B.Tech courses that is complemented by various co-curricular and extra-curricular activities. ASET, managed by Ahalia International Foundation, is approved by AICTE, New Delhi and is affiliated to Dr. A.P.J. Abdul Kalam Technological University and ISO 9001 : 2015 certified Institution.

Department of Electrical and Electronics Engineering

The department of Electrical and Electronics Engineering at the Ahalia School of Engineering and Technology, Palakkad was established right at the inception of the college, in July 2012. The department has been consistently taking efforts in producing illustrious engineering graduates of high calibre who can occupy prestigious positions in the academic and industrial fields. The department offers a four year UG programme B.Tech in Electrical and Electronics Engineering. The department faculty have various areas of specialization viz. Power System Engineering, Power Electronics and drives, Energy Engineering, Applied Electronics, Control Systems, Bio-Medical Engineering, Instrumentation and Control etc. Most of the faculty members of the department are pursuing their research in various technical universities.

Texas Instrument (TI) Innovation Lab

The Department of Electrical and Electronics Engineering established the Texas Innovation lab in collaboration with STEPS Knowledge services Pvt. Ltd, Coimbatore. The lab is well equipped with analog system lab starter kit (ASLK PRO) MSP 430 controllers, TIVA-EK launch pad and other sensors including ultrasonic sensor, PIR sensor, along with Arduino, Raspberry Pi boards. Students have been participating in various project design competitions organised by Texas Instruments Inc.

STEPS Knowledge Services Pvt. Ltd, Coimbatore

Steps Knowledge Services Pvt. Ltd., is a design house catering to design, development, proto/pilot production and transfer of technology for new products including intellectual property rights (IPR), Development and engineering of Special Purpose Machines (SPM), End of Line Testers, Quality Inspectors and Functional Testers for various industrial verticals. Process enhancements consulted are for production and /or quality improvements, line balancing, transitioning product lines from pilot to volume production, optimization for QMS / 5S. Training services are offered to skill electronic engineers suitable for a broad span of electronic industries, versatile needs for sensors with analog front end, power, embedded, DSP to embedded Linux. Specific trainings on particular products / technology / platform / domain / industry are also provided, which includes upcoming technologies viz. Internet of Things (IoT).

About the workshop

The Internet of things (IoT) is a network of physical devices, vehicles, and other items embedded with electronics, software, sensors, actuators, and network connectivity which enable these objects to collect and exchange data. The IoT allows objects to be sensed or controlled remotely across existing network infrastructure, creating opportunities for more direct integration of the physical world into computer-based systems, and resulting in improved efficiency, accuracy and economic benefit in addition to reduced human intervention. 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, virtual power plants, smart homes, intelligent transportation and smart cities.

The number of robots used worldwide is constantly increasing. They are more and more present in different workplaces such as manufacturing, processing operations, dangerous areas, medical environments, military, inaccessible areas etc. Also, robots are able to do social works like assisting people with disabilities or even playing when toys are robotic techniques based. In our days ICT applications became more complex while including various technologies such as wireless communication, wireless or embedded sensor networks, virtual reality, artificial intelligence, cloud computing/storing etc. First developed as a tool, nowadays a robot can be integrated as an entity in the new paradigm of Internet of Things (IoT). Thus, in the IoT, a robot can be connected as a thing and establish connections with other things over the Internet.

This workshop enables participants to gain fundamental knowledge and exposure on the historical development, architecture and programming techniques of IoT. It mainly focuses on hands on experience, thereby making the participants to program the devices and link them with cloud platform. Aspects related to the technologies involved in the transformation of the robot from a "tool" to a "thing" connected to the Internet of Things will be presented.