Rajalakshmi Institute of Technology, Chennai

IEEE SB STB05131 Activities in the year 2017

Two Days Workshop on Internet of Things (IoT) using IBM-BLUEMIX & ESP 8266

Department of ECE and IEEE SB of Rajalaskshmi Institute of Technology has organized Two Days Workshop on Internet of Things (IoT) using IBM-BLUEMIX & ESP 8266 in association with ResPro Labs, Chennai on 27th and 28th January 2017 at Rajalakshmi Institute of Technology. Mr.Shabarinath Premlal, Founder, ResPro Labs inaugurated the workshop and delivered a key note address on Recent trends in Cloud Computing and IOT

The following topics were covered during the workshop: Introduction to IOT by Mr.Shabarinath Premlal, Founder, ResPro Labs,Introduction to IoT,Introduction Bluemix Cognitive Bluemix cognitive IoT demonstration,Overview of Bluemix, Architecture, various cloud offerings from IBM,Infrastructure, Services, Application Runtimes available in Bluemix, How to build and deploy a simple application in the Cloud using Bluemix by Mr.Shabarinath Premlal and his team of experts. Raghavendra Rao-C S Division Chairman, Dr. K Raghuveer-Professor & Head, ISE, Dr. H D Phaneendra, TEQIP CoordinatorNIE. The programme was organized by Dr.R.Rajeswari,Convener and coordinated by Mr.K.Siva Kumar,AP(SS).

Hands-on training programme has been conducted in the topics of Introduction to Node MCU,

Node MCU IoT kit driver installation,Getting Started with Node MCU,Working with various sensors,Lab exercise using Node MCU, Creating a bluemix application with IOT starter boilerplates, Sending Data to IBM Cloud and Analyzing the data in cloud

At the end of all sessions, all participants were given their valuable feedback about all two days of technical sessions by IOT experts.

Report on the Quiz

An Intradepartmental technical event named Concurzo'17 was conducted for the II year ECE students by the Association of collegiate excellence, in association with IEEE SB on 25.1.17.The event was a quiz contest with three different rounds. The rounds conducted are as follows:

1. Prelims (first round)-Pen and paper based.

2. Second round- One word Three clues (Technical)

3. Final round-　　　a.Technical connexions.

　　　　　　　　　　b.Stage quiz.

The participation was made mandatory for all the II year students. The prelims round was conducted on 25.01.2017(Wednesday) in the respective classes and it was a pen-paper based test.

On the day of the event (27.01.2017), the 30 shortlisted teams assembled in the venue for the inaugural function of the event. Respected Vice principal gave the inaugural address. He encouraged the students to actively participate in such co-curricular activities to improve their learning skill and also insisted certain steps to improve our technical knowledge.

Dr.G.R.Suresh,Professor, ECE　addressed the contestants and gave certain tips to carry them forward technically.

National Conference on "Recent Trends in the Development of Smart Cities (NCRTDSC'17)

IEEE SB provided support for the Two-day **National Conference on Recent Trends in the Development of Smart Cities (NCRTDSC'17)** on 3rd & 4th March 2017 organized by the Dept. of Electronics and Communication Engineering and supported by IEEE Madras Section.

The conference was inaugurated by Deputy Director of Training, Central Training Institute for Instructors (CTI),Guindy, Chennai.Dr. S. Selvaraju, Principal,RIT and Dr.S.N.Murugesan, Principal, REC addressed the conference.

Resource persons included:

- Prof.Dr.V.Prithiviraj,Dean,ECE,RIT, who spoke on "IoT based Smart City – a Centric Approach"
- Mr.MakeshKannaiyan,Chief Technology Officer,Access Payment Co.L.L.C,Dubai spoke on "Internet of Things" especially focusing on Smart City, Smart Home and other sectors
- Mr.Naresh Vedachalam, Head, R&D, ResPro Labs, Chennai gave a speech on "IoT for smart mobility"

Workshop on IoT for Smart Cities with Hands-on Training using Node MCU and IBM Bluemix Cloud was conducted on both of these days. The conference concluded with the Valedictory session which was graced by Mr.Makesh Kannaiyan,Chief Technology Officer,Access Payment Co.L.L.C,Dubai. The conference ended with vote of thanks proposed by Prof. Dr.G.Nirmala Priya.

The best papers have been awarded with certificates and they were felicitated at the hands of dignitary.

Technical Lecture on "Embedded Systems and Real Time Applications"

IEEE SB and Department of ECE organized a Technical Lecture on "Embedded Systems and Real Time Applications" by Mr.E.Arun Kumar, Vice President, M/s. Retech Solutions Pvt.Ltd., Chennai, on 28th July, 2017.

He discussed about the evolution of Embedded Processors, selection of suitable processors and peripherals for Arduino based embedded systems. He also spoke about the design of industrial robots and its applications.

Technical Lecture on "Green Radio"

IEEE SB organized a Technical Lecture on "Green Radio" by Prof.Dr. M.D.Selvaraj, Assiatant Professor, Indian Institute of Information Technology Design & Manufacturing, Kancheepuram on 5nd August, 2017.
In his talk, he gave a brief introduction of the history of development of Electromagnetic Radiation system. He also discussed about the present day problems in Mobile Communications and E-M radiation levels in various wireless systems.
The coverage of the lecture included insights on Different sources of power for BTS, Energy management in base stations, Need for Green radio, Possible Solutions to Green Radio and Practical aspects of implementing Green Radio, and about the 5th Generation Cellular Communication Standards.145 students benefitted from the talk.

Guest Lecture on "Application of Nano science in Electronics"

IEEE SB and Department of ECE organized a Guest Lecture on "Application of Nano science in Electronics" by Dr.K.P.Bhuvana, Scientist, CIPET, Chennai on 28nd August, 2017.

In her talk, she gave a brief introduction of the examination of the developments in Nano science and nanotechnology and the perspectives in the next decades. She also discussed about the interface of nanotechnology with the environmental technologies, energy, information technologies,materials science and possibilities of integration of nanoscience and nanotechnology into the education and into outreach activities..

Guest Lecture on "Nano Science and Imaging Techniques"

IEEE SB and Dept.of ECE organized a Guest lecture on "Nano Science and Imaging Techniques" by Prof.Dr.B.S.Panigrahi, Scientific Officer 'H+',Head, Luminescence Program,HSEG,Indira Gandhi Centre for Atomic Research,Kalpakkam,on 12th August 2017

He briefed about the history of development of Nano materials, Energy Band theory of Materials and the difference in the characteristics of materials in their bulk form and Nano form. He listed out the importance of Nano Materials and their applications in the field of engineering. He spoke about the development of Scanning Electron Microscopy Imaging ,uses of Nano materials in the field of Medical diagnosis and Bio-Technology and development of Nanoparticle Based Contrast Agent for Dual Modal Imaging of Cancer.

Inter Departmental Symposium

EEE dept. with IEEE SB organized an Inter Departmental Symposium "VOLTZFEST 2.0" ,on 1st September2017.
403 teams from CSE, IT, ECE and Mechanical Engineering departments were participated in various events.Chief Guest Mr. Prashant Mohan, Program Chair, IEEE Extreme felicitated the gathering about IEEE Membership and benefits.

Guest Lecture on Electrical Machines

EEE dept. with IEEE SB organized a Guest Lecture in the area of "Electrical Machines", on 09th September 2017.

30 students attended the Guest Lecture given by Mr.E.Arun Kumar, RETECH Solutions Private Limited, Chennai. The event was coordinated by Mrs.K.Ranjitha, AP-EEE and supported by student coordinator, Ms.N.Anu Ranjana.

Guest Lecture on Power System Analysis

EEE dept. with IEEE SB organized a Guest Lecture in the area of "Power System Analysis" on 15th September 2017.
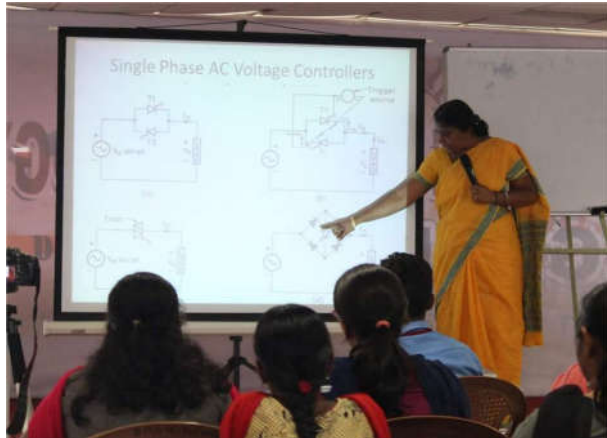
50 students attended the Guest Lecture deleiverd by Dr.R.Kalaivani, Professor, Rajalakshmi Engineering College, Chennai. The event was coordinated by Mr.S.Sathishkumar, AP-EEE and supported by student coordinator, Ms.T.Tamil Bharathi.

Guest Lecture on Power Electronics

EEE dept. with IEEE SB organized a Guest Lecture in the area of "Power Electronics", on 7th October 2017.

35 students attended the Guest Lecture delivered by Dr.A.Kavitha, Assistant Professor, College of Engineering, Guindy. The event was coordinated by Mr.R.Elavarasu,AP(SG)/EEE and supported by student coordinator, Mr.N.Rishikumar.