ELECTRONICS & COMMUNICATION ENGINEERING

CAMPUS PULSE

NEWS LETTER

2018-19 Issue 1(Aug-Nov)

LAKIREDDY BALIREDDY COLLEGE OF ENGINEERING
MYLAVARAM

A TWO WEEK LABVIEW CERTIFICATION PROGRAM

" HANDS ON TRAINING ON myDAQ AND myRIO USING LABVIEW"

6th August to 18th August, 2018

About the Program

Building on information taught in LabVIEW Core 1, Data Acquisition and Signal Conditioning training teaches the fundamentals of PC-based data acquisition and signal conditioning. Students learn how to perform different types of acquisition and to identify the correct sensor for their measurements. Students also discuss signal conditioning fundamentals and install and configure hardware in classroom-based courses.

NI myRIO is a revolutionary hardware/software platform that gives students the ability to "do engineering" and design real systems more quickly than ever before. Complete with the latest Zynq integrated system-on-a-chip (SoC) technology from Xilinx, the NI myRIO boasts a dual-core ARM® Cortex™-A9 processor and an FPGA with 28,000 programmable logic cells, 10 analog inputs, 6 analog outputs, audio I/O channels, and up to 40 lines of digital input/output (DIO). Designed and priced for the academic user, NI myRIO also includes onboard WiFi, a three-axis accelerometer, and several programmable LEDs in a durable, enclosed form factor.

Convener

Dr.Y.Amar Babu, *Professor& HOD, Dept. of ECE*

Co-ordinators

Dr.P.Lachi Reddy, *Professor*

Mr B.V.N.R.Siva Kumar, Associate *professor*

Mr.V.V.Rama Krishna, *Associate professor*

Smt.M.Ramya Harika, *Assistant professor*

Mr K.Ravi Kumar, *Assistant professor*

1. Lighting of Lamp by Dr.K.Appa Rao, Principal

2. Dr.Y.Amar Babu, HOD of ECE Department Addressing Students

3.. Dr.K.Appa Rao, Principal, Addressing Students

4. Mr. L.R.N.K.Prasad Reddy,Vice Chairman Addressing Students

5.Mr. Natarajan, Resource Person, Addressing Students

6. Participants of Workshop

<u>Inauguration of Reconfigurable Computing Club in Department of ECE</u>

Reconfigurable Computing club, the technical club of ECE is inaugurated on 11.08.2018. The major objective of this club is to create awareness on e – waste management as well as to make the students to cope up with the latest developments in the technologies. In the rapidly changing modern world, the electronic gadgets that are being used are becoming useless as and when the technology is upgraded there by resulting in a lot of electronic waste resulting in eco imbalance. This is in view of various materials that are used in the manufacturing of electronic goods. Reconfigurable computing addresses this problem by facilitating continuous change in the functionality of devices.

Dr.Y.Amar Babu, Head, Department of ECE, has formally inaugurated the club by explaining the students about the significance of Reconfigurable Computing. In his welcome address, he mentioned that electronic waste is becoming a serious problem to the society and must be handled with utmost care. It was also told that the students be equipped with expertise on various platforms in the competitive world. The events that will be conducted under the technical club should be effectively utilized by each, as told by the Head. Later, dean of Academics, Dr E.V.Krishna Rao addressed the students by explaining them the significance of conducting such events. Prof. B.Ramesh Reddy, In charge of Internal Quality Assessment Cell also shared his views and motivated the students for getting expertise in multiple fields.

On this occasion, the following events have been organized for student skill up gradation.

- ❖ **Workshop on PCB design**
- ❖ **Awareness Programs on Internet of Things and Foreign Languages**
- ❖ **Communication skills**

Total of 306 students from 2nd ,3rd and 4th year have participated in the above mentioned events.

Workshop on PCB Design

Any electronic circuitry that is designed must be compactly imported on to a board in the process of designing. The layout and the interconnects should be optimally planned that results in such a board where there exist no problems in near future. A printed circuit board (PCB) mechanically supports and electrically connects electronic components or electrical components using conductive tracks, pads and other features etched from one or more sheet layers of copper laminated onto and/or between sheet layers of a non-conductive substrate. Components are generally soldered onto the PCB to both electrically connect and mechanically fasten them to it. Printed circuit boards are used in all but the simplest electronic products. They are also used in some electrical products, such as passive switch boxes. Mr.C. Sudhakar Reddy, Founder, SCR technologies has provided hands on training to students on PCB design. The various steps in the layout preparation and final design are elaborated to students.

Orientation Program   on Internet of Things

The Internet of Things (IoT) is the network of physical devices, vehicles, home appliances, and other items embedded with electronics, software, sensors, actuators, and connectivity which enables these things to connect and exchange data, creating opportunities for more direct integration of the physical world into computer-based systems, resulting in efficiency improvements, economic benefits, and reduced human exertions. Mr.P.Jyothi Swaroop, Trainer & Developer, Andhra Pradesh State Skill Development Centre (APSSDC) has given a bird's eye view on IoT. The students were educated about automation and how IoT can replace human involvement in various fields. It was told that student can select any one domain within IoT and become experts in that filed.

Awareness Program on Foreign Languages

An awareness program on foreign languages has tried to guide students about the need for being multilingual In today's era, multilingualism has become more than just important. Knowing a foreign language other than one's native language has evolved to be extremely beneficial. Whether viewed from the financial or social aspect, being able to communicate in a foreign language helps to make 'real' connection with people and provides a better understanding of language. Dr.Venkata Poola Bala ,visiting professor, Acharya Nagarjuna University has given several tips for learning any language. The students were told that instead of practicing several years , one can learn any language by following relevant approaches.

All the events were winded by felicitating Dr. Venkata Poolabala by Dr.Y.Amar Babu and Dr.E.V.Krishna Rao.

LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING
(AUTONOMOUS)
Accredited by NAAC with 'A' Grade, ISO 9001:2015 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B.Reddy Nagar, Mylavaram-521230, Krishna Dist, Andhra Pradesh, India

DEPARTMENT OF ECE

REPORT ON INDUSTRIAL VISIT

Event Type   :   Industrial visit

Date / Duration   :   11 -09-2018 , 12-09-2018

Place of visit   :   CYCLONE DETECTION RADAR STATION,Machilipatnam.

Name of Coordinator :   K.RANIRUDRAMA, Assoc. Professor

Target Audience   :   V-SEM , ECE STUDENTS

Objective of the event: RADAR COMMUNICATION IN WEATHER FORECAST

Outcome of event   :   EXPOSURE TO COMMUNICATION ENGINEERING

Description / Report on Event:

1 .Received a request letter from the students for arranging industrial tour.

2. Applied to the industry for getting permission.

3.Permission Granted from the industry to visit.

4. Submitted the details to the principal for sanctioning permission.

5. Arranged two buses separately for both boys and girls along with two faculty in charges per bus by collecting undertaking forms of each students from their parents.

6. Visited the Centre on dated 11/09/2018,12/09/2018 Reporting time: 10:30 Hrs All the visitors permitted by showing their Identity Proof.

7. Visited Trans Receiver section : i. Transmitter Control unit

                   ii. Transmitter section with KLYSTRON tube with KPS,cooling system.

                   iii. Receiver section with controls

8. Display hall : i. Monitoring antenna system

         ii. Analyzing received signals using PPI.

         iii. Detecting the range using RAINBOW software.

9. Feedback / Suggestions : Two hours visiting from 10.30 to 12.30 it is not sufficient .

Photographs　　　　:

Research Colloquium on 06-10-2018

1. Smt. T. Kalpana had given a presentation on " Lab-on-chip ". In the presentation, the electronic circuitry required for clinical test is discussed and the different fabrication steps are highlighted.

2. Mr. Venkata Ashok had given presentation on " Internet of Things (IOT) ". In the presentation the components of IOT RFID, Sensor, Smart tech is discussed. The presentation covers the Smart Grid using IOT and ended with applications of IOT.

3. Mr.R. Harikishan had given a presentation on " Design of design for testability in timely testing of VLSI Circuits ". In the presentation, the importance of testing and testability design is discussed. Also the equipment for automatic test and fault simulation is highlighted.

Smt.T.Kalpana

Mr. Venkata Ashok

Mr. R. Harikishan

Research Colloquium on 13-10-2018

1. Mr.M. K. LingaMurthy had given a presentation on " Introduction to Deep Learning". In the presentation the concepts of AI, ML, Deep Learning and learning algorithms are discussed. Different applications of deep learning in various fields are highlighted.

2. Mr.K. Ravi Kumar had given presentation on " Digit recognition using Neural Networks and Math used". In the presentation the basic structure of Deep neural network with the Hand- written digit recognition example is discussed. Activation functions like ReLU, sigmoid in deep learning is discussed .

3. Mr.M.Sambasiva Reddy had given a presentation on Analysis of the reconstruction of sparse signals in the DCT Domain applied to audio signals. In the presentation the sparse signal and sparsity in frequency domain is discussed.


Mr.M. K. Linga Murthy
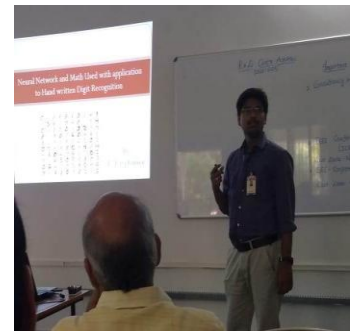
Mr.K. Ravi Kumar

Mr. M. Sambasiva Reddy

1. Mr. P. Venkata Rao had given a presentation on"Clustering and Compressive sensing in Wireless Sensor Networks " . In the presentation distributed energy efficient clustering like SEP, DEC techniques are discussed. Integration of hierarchical compressive sensing with clustering is discussed.

2. Smt.K. Lakshmi has given a presentation on " AI based Embedded Assistive system for college". The problem facing by students regarding permissions are discussed and the automation of this process using AI is discussed.

3. Mr.Ch.V. Naga Bhaskar had given a presentation on "Analysis of Near-Far problem of a pseudolite for GNSS based positioning". In the presentation how pseudolite is useful for finding position when signal from one or more satellites is missing.

4. Mr. A. Anil Kumar reddy had given presentation on wave guides. In the presentation Rectangular, circular wave guides and applications are discussed.
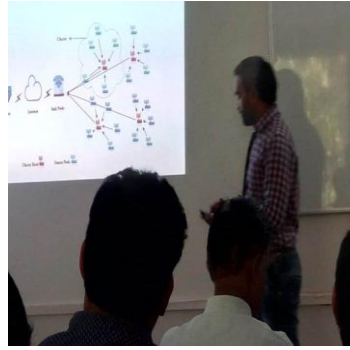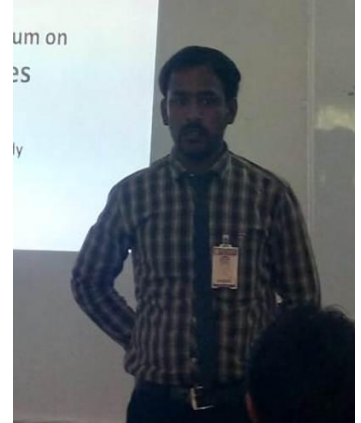

Mr. P. Venkata Rao

Smt.K. Lakshmi

Mr.Ch.V. Naga Bhaskar

Mr. A. Anil Kumar Reddy