



LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)

Accredited by NAAC & NBA (CSE, IT, ECE, EEE & ME)

Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada

L.B.Reddy Nagar, Mylavaram-521230, Krishna Dist, Andhra Pradesh, India

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



REPORT ON Guest lecture on “ Arm controllers and communication Protocols”

Event Type	:	Guest Lecture
Date / Duration	:	28-12-2021 /One day
Resource Person	:	Mr.S.Bhavani Sankar , Executive Manager, R & D, Efftronics systems Pvt.Ltd
Name of Coordinator	:	Dr.G.L.N.Murthy
Target Audience	:	VII Semester B.Tech Students
Total no of Participants:	:	VII Semester Students-75 Nos.
Objective of the event:	:	To expose the students to the trends in advanced controllers and communication protocols
Outcome of event	:	By attending the guest lecture, the final year students can be able to get exposed to the current trends in embedded platform. The knowledge gained can be used for developing new ideas in projects. Being majority of the students can realize the need to shift towards core jobs.

Description / Report on Event:

The guest lecture began with inaugural address by Dr.Dr.G.L.N.Murthy , Coordinator, Reconfigurable Computing Club ,Department of ECE ,who highlighted the need for getting exposed to latest advancements. It was it is regular practice to conduct hands on training programs, guest lectures and workshops under the club. Being the final year students all must get acquainted to latest developments to strive well in the relevant job platform. It was told that Efftronics is continuously supporting the college through faculty training programs and guest lectures for knowledge transfer.

Mr.S.Bhavani Sankar , Executive Manager , R & DEfftronics systems Pvt.Ltd started his lecture by differentiating between core jobs and software jobs. It was told that the attitude of the students should be shifted from programming oriented jobs to core jobs. In the entire world, China is leading towards

development of hardware where India is standing high in providing software solutions. From the beginning China is concentrating and investing in hardware clusters and today majority of the world's technological needs are having solutions with origins from China. It was told that software oriented jobs are not going to thrive long as they rely on projects. If industry is in down trend, no projects be there resulting in boomerang.

This was followed by an overview of embedded environment to the students. The architecture of the ARM controller was explained and the need for final year students to get acquainted with latest developments in hardware was elaborated. Advance RISC machine is built with 32 bit Reduced instruction set computer instruction set. An ARM controller is having high performance CPU of 32 bits and pipelining is done through three stages. Most of electronic devices like tablets, mobiles and smart devices are making use of ARM. The role of communication protocols in the embedded environment was also explained. Zigbee is an IEEE 802.15.4-based specification for a suite of high-level communication protocols used to create personal area networks with small, low-power digital radios, such as for home automation, medical device data collection, and other low-power low-bandwidth needs, designed for small scale projects which need wireless connection. Hence, Zigbee is a low-power, low data rate, and close proximity (i.e., personal area) wireless ad hoc network. The technology defined by the Zigbee specification is intended to be simpler and less expensive than other wireless personal area networks (WPANs), such as Bluetooth or more general wireless networking such as Wi-Fi. Applications include wireless light switches, home energy monitors, traffic management systems, and other consumer and industrial equipment that requires short-range low-rate wireless data transfer.

Zigbee devices can transmit data over long distances by passing data through a mesh network of intermediate devices to reach more distant ones. Zigbee is typically used in low data rate applications that require long battery life and secure networking. (Zigbee networks are secured by 128 bit symmetric encryption keys.) Zigbee has a defined rate of 250 kbit/s, best suited for intermittent data transmissions from a sensor or input device. The meeting concluded by advising the students to get not stick on to software jobs only but also to concentrate more on core jobs.

Feedback / Suggestions: Nil

Photographs :



Addressing by Dr.G.L.N.Murthy,
Coordinator, RC club,
Department of ECE



Addressing by Sri.S.Bhavani Sankar,
Executive Manager,R & D,
Efftronics systems Pvt.Ltd



Students listening to the guest lecture

ప్రజాశక్తి

29/12/24

హార్డ్వేర్ రంగంలో ఉద్యోగావకాశాలు

ప్రజాశక్తి, మైలవరం : విద్యార్థులు హార్డ్వేర్ రంగంలో నైపుణ్యాలను సాధించడం ద్వారా మంచి ఉద్యోగ అవకాశాలు లభిస్తాయని ఎప్టానిక్స్ ప్రవేటు లిమిటెడ్ ఎగ్జిక్యూటివ్ ఇంజనీర్ ఎస్ భవాని శంకర్ అన్నారు. స్థానిక లకిరెడ్డి బాలిరెడ్డి ఇంజనీరింగ్ కళాశాలలో మంగళవారం ఆర్య కంప్యూటర్స్ కమ్యూనికేషన్ ప్రోటోకాల్ అనే అంశంపై విద్యార్థులకు అవగాహన కార్యక్రమం జరిగింది. ఈ సందర్భంగా ఆయన మాట్లాడుతూ.. సమకాలైత ప్రపంచంలో ఉన్నత స్థాయికి ఎదగటానికి అధునిక హార్డ్వేర్ పరిజ్ఞానం ఎంతో ఉపయోగపడుతుందన్నారు. ఈ కార్యక్రమంలో ఈసీఈ డిపార్టుమెంట్ కంప్యూటింగ్ క్లబ్ కో ఆర్డినేటర్ డాక్టర్ జీఎల్ఎస్ మూర్తి, విద్యార్థులు పాల్గొన్నారు.

ఈనాడు

29/12/24

నైపుణ్యాలంటే హార్డ్వేర్ రంగంలోనూ అవకాశాలు

మైలవరం, న్యూస్టుడే: విద్యార్థులు నైపుణ్యాలను సాధిస్తే హార్డ్వేర్ రంగంలో ఉద్యోగ అవకాశాలు అధికంగా ఉంటాయని ఎప్టానిక్స్ సిస్టమ్స్ ప్రైవేట్ లిమిటెడ్ ఈఈ ఎస్.భవానిశంకర్ సూచించారు. స్థానిక లకిరెడ్డి బాలిరెడ్డి ఇంజనీరింగ్ కళాశాలలో మంగళవారం ఈసీఈ చివరి సంవత్సర విద్యార్థులకు అతిథి ఉపన్యాస కార్యక్రమాన్ని నిర్వహించారు. ఆయన మాట్లాడుతూ సాఫ్ట్వేర్ రంగంలో అవకాశాలు మందగించినా, ఉన్నత స్థాయికి ఎదగటానికి హార్డ్వేర్ పరిజ్ఞానం దోహదపడుతుందని వివరించారు. కార్యక్రమంలో సమన్వయకర్త జీఎల్ఎస్ మూర్తి పాల్గొన్నారు.