CSE DEPARTMENT NEWS LETTER

QIS INSTITUTE OF TECHNOLOGY

(Approved by AICTE, New Delhi & Affiliated to JNTU, Kakinada)

(AN ISO 9001: 2008 Certified Institution)

Ponduru Road, Vengamukkapalem, Ongole, A.P - 523 272

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TECHNO-FOCUS

2015-16

April to June

Principal's Message

I am happy to note that the editorial board brings out newsletter for the period April to June 2016. It is great to find a considerable number of participants in co curricular and extracurricular activities which certainly prove that our staff and students are adequately equipped and possess necessary skill-sets to bring such laurels to the institution.

Dr. G. Lakshmi Narayana Rao

HOD's message

Am very happy that our Computer science and engineering is releasing Newsletter. It is a platform to bring out the hidden talents of students and faculty. The major strength of the department is a team of well qualified and dedicated faculties who are continuously supporting the students for their academic excellence. We have arranged several guest lectures and workshops for our 2nd, 3rd and 4th year students in this semester. I would like to thank all my colleagues for their tireless efforts to help the department progress at a very steady pace.

Mr. T.V.Subrahmanyam

Department of Computer Science and Engineering

The Department of Computer Science & Engineering was started in the year 2008. With an intake of 60, now total strength of the department is 480. The college conducts the examinations and the degree is awarded by JNTUK Kakinada. University incorporates latest developments in Basic Computer Science, Programming, Application development, Communication, Data mining and warehousing and allied fields in a dynamic fashion so that the student is exposed to the latest technological advancements during the course of study.

Vision of the Department

To produce highly knowledgeable computer science and engineering professionals comprising of technical skills & competence to meet the global requirements embedding with research, ethical values and societal commitment.

Mission of the Department

- Impart quality education in computer science and engineering through innovative teaching and learning methodologies.
- Conduct industry ready skill development programs to bridge the gap between academia and industry to produce competitive software professionals with research and lifelong learning.
- Inculcate team work, ethical values to make them socially committed professionals.

Program Educational Objectives (PEOs)

PEO 1: Graduates will have solid foundation in fundamentals of computer science and engineering required to solve computing problems and create innovative software products and solutions for the real life problems.

PEO 2: Graduates will have technical competence and skills to use modern and cost-effective tools and technologies and have extensive and effective practical skills in computer science and engineering to pursue a career as a computer engineer.

PEO 3: Graduates will have attributes like professionals with world class academic excellence, ethics, best practices, values, social concerns, lifelong learning and openness to other international cultures to meet the global needs.

PEO 4: Graduates will have managerial and entrepreneur skills with cross-cultural etiquettes, leading to a sustainable competitive edge in R&D and meeting societal needs.

Placement Training

S.NO	Date of the Event	Resource person	Details of training Program
1	30.4.2016	Mr.Srinath	Campus Recruitment Training Program
2	11.4.2016	Ms.Garima	Workshops on Overseas Education
3	30.4.2016	Mr.Srinath	Campus Recruitment Training Program

Placement

The following final year students of our college got placed in various organizations.

Programs Name and Assessment Year(2015-2016)				
S.No	Name of the Student Placed	Enrollment No	Name of the Employer	Appointment Letter Reference number with Date
1	ADDALA MAHALAKSHMI	12MA1A0502	Adaptec Systems, Secunderabad	23-12-2015
2	B.RESHMA	12MA1A0503	PVS Private Solutions,Hyderabad	28-12-2015
3	BODAPATI MOUNIKA	12MA1A0504	G J Solutions, ameerpet	3-4-2016
4	CH.PAVANI	12MA1A0505	KNR Pvt Ltd,Chennai	6-4-2016
5	G.KRISHNA VENI	12MA1A0510	Adaptec Systems Secunderabad	23-12-2015
6	KONAGANDLA SIVA LAKSHMI DURGA	12MA1A0513	Fony Technologies, Coimbatore	6-11-2015
7	MEDARAMETLA MOUNIKA	12MA1A0519	Adaptec Systems Secunderabad	23-12-2015
8	R.SUREKHA	12MA1A0527	BHARAT MATRIMONY, Chennai	8-04-2016
9	T.BINDU PRIYA	12MA1A0530	Hexaware Solutions,Hyderabad	5-04-2016
10	G.LAKSHMI PRASANNA	12MA1A0511	G J Solutions, ameerpet	3-04-2017
11	M.DIVYA	12MA1A0518	KNR Pvt Ltd,Chennai	6-04-2017
12	KONDAPALLI BHARGAV RAMU	12MA1A0546	Plannet Innovation Technologies, Hyderabad	9-3-2016

13	PAVALURI VIJAY KUMAR	12MA1A0556	Xportsoft, Hyderabad	XPS/HR/INT/REC/LOI/100171-130

Student Achievements & Contributions

Merit Prizes to Topper Students

మెరిట్ విద్యార్థులకు ప్రోత్సాహక బహుమతులు

బహుమతులు అందజేస్తున్న నాగేశ్వరరావు

ఒంగోలు : ఈసీఈ, సీఎస్‌సీ, సివిల్ ఇంజినీరింగ్ విభాగాల్లో ప్రతిభ చూపిన మెరిట్ విద్యార్థులకు నిడమానూరి ఎడ్యుకేషనల్ సొసైటీ అధ్యక్షుడు నిడమానూరి నాగేశ్వరరావు ప్రోత్సాహక బహుమతులు అందించారు. స్థానిక క్విస్ ఇంజినీరింగ్ కాలేజీలో బుధవారం జరిగిన కార్యక్రమానికి ఆయన అధ్యక్షత వహించారు. ప్రోత్సాహక బహుమతులు సాధించడమనేది స్ఫూర్తిదాయకంగా ఉంటుందని, కనుక ప్రోత్సాహక బహుమతులు పొందేందుకు ప్రతి ఒక్కరూ దృష్టిసారించాలని పిలుపునిచ్చారు. ఈ సందర్భంగా మెరిట్ సాధించిన విద్యార్థులను క్విస్ విద్యా సంస్థల అధినేత ఎన్.ఎస్ కళ్యాణ్‌చక్రవర్తి, క్విస్ ఇంజినీరింగ్ కాలేజి ప్రిన్సిపాల్ డాక్టర్ జి.లక్ష్మీనారాయణరావులు అభినందనలు తెలిపారు.

పురస్కారాలు అందజేస్తున్న క్విస్ కళాశాల అధినేత నాగేశ్వరరావు

ఇంజినీరింగ్ విద్యార్థులకు పురస్కారాలు

ఒంగోలు నగరం, న్యూస్‌టుడే: క్విస్ ఇంజినీరింగ్ కళాశాలలో నాలుగో సంవత్సరం ఈసీఈ, సీఎస్‌ఈ, సివిల్ ఇంజినీరింగ్ విద్యార్థులకు బుధవారం ప్రతిభా పురస్కారాలు అందజేశారు.ప్రిన్సిపల్ జి.లక్ష్మీనారాయణరావు అధ్యక్షతన జరిగిన కార్యక్రమంలో క్విస్ కళాశాల అధ్యక్షుడు నిడమానూరి నాగేశ్వరరావు పాల్గొని పురస్కారాలు అందజేశారు. విద్యార్థులను కళాశాల కార్యదర్శి ఎన్.ఎస్ కల్యాణచక్రవర్తి అభినందించారు.

Technical Article

Wearable Computing

A wearable computer is a computer that is subsumed into the personal space of the user, controlled by the user, and has both operational and interact ional constancy i.e., is always on and always accessible. It is a device that is always with the user, and into which the user can always enter command and execute a set of such entered commands, and in which the user can do so while walking around or doing other activities. A wearable computer is a computing device small and light enough to be worn on one's body without causing discomfort. Unlike a laptop or a palmtop, wearable computer is constantly turned on and interacts with the real-world task.

How does a Wearable Computer look?

A typical wearable computer consists of a battery or human powered computing unit and carried on a belt or in a jacket. A wearable computer will have a mother board worn inside a fashion garment, connecting all the components of the system. The components will be placed at different parts of the body as per the user convenience; power pack and storage in shoes, display on the glasses and keyboard input on the wrist. User input to the computer is either mostly voice driven or sensed from gestures or body motion. The display and audio output generated by the computer will be relevant to the context and environment. The data storage is local and does not depend on any network connection.

Components of a Wearable Computer

Input devices:

Speech recognition may appear as the most suited input device, but may not be preferred in all kinds of applications & environments, due to privacy and performance issues. Gesture Input devices are simple, compact, and optimized for wearable use. These devices receive inputs from the natural gestures.

Handwriting& Keyboard could be one of the most efficient input devices,

provided the input device is not too small or awkward. These devices are just worn on the hands or wrists and senses he typing input or handwriting. This does not have any cables and communicates on infrared.

Output devices:

The output device of a wearable computer could be either a head-mounted display (HMD) unit with an earpiece or only the earpiece for some applications. The HMD works like an ordinary monitor, providing an image floating in the air in front of you. It uses LCD or TFT technology. This allows augmented reality, where virtual information overlaps the real world.

Networks

There are two different kinds of networks in reference to a wearable computer. One is to connect the device to the external world and the other is to interconnect the various components, the later one being new for wearable computers. The first issue of connecting to the WC to the external world has several choices; WAP, or Cellular Digital packet data. The second issue of interconnecting the various parts of the WC may involve both wired and wireless connections. Peripherals like HMD and wrist/finger worn devices may use standard wireless connections like Bluetooth. There could also be a third type of communication, two wearable computers talking to each other. Since you wear them you integrate the wiring into normal clothing. It is wireless and comfortable. Here we also make use of body network i.e., we send signals by using your human body as a conduct.

RATIONAL DETAILS

How do you operate a wear comp? What sort of software do you use in it? What do you use it as input and output devices? Where do you Store data? How do you store them? All these are common questions that would arise in someone new to wear comp below given are brief answers to such common questions.

SOFTWARE

The commonly used operating system on a wearable computer is WOS (wear comp OS). Red hat and GNU Linux can be run in close coordination as an operating system too. Various software mostly GNU freeware such as GIMP (GNU image modulation program) as well as various calendar and planning programs can be run on a wearable computer.

HARDWARE

Prices of wearable computers tend to be in "thousands of dollars" whether you buy old or new. An alternative approach is to assemble a low cost system. For example, you can buy an old computer that has NTSC output and connect to small CRT from camera. Some such complete wearable computer systems have been built for as little cost.

Brain Computer Interface

A brain-computer interface, sometimes called a direct neural interface or a brain machine interface, is a direct communication pathway between a human or animal brain (or brain cell culture) and an external device. In one BCIs, computers either accept commands from the brain or send signals to it but not both. Two way BCIs will allow brains and external devices to exchange information in both directions but have yet to be successfully implanted in animals or humans. Brain-Computer interface is a staple of science fiction writing. In its earliest incarnations no mechanism was thought necessary, as the technology seemed so far fetched that no explanation was likely. As more became known about the brain however, the possibility has become more real and the science fiction more technically sophisticated. Recently, the cyberpunk movement has adopted the idea of 'jacking in', sliding 'biosoft' chips into slots implanted in the skull(Gibson, W.1984).Although such biosofts are still science fiction, there have been several recent steps toward interfacing the brain and computers.

A Brain implant (brain-machine interface) is a communication system that does not depend on the brains normal output pathways of peripheral nerves and muscles. It is a new communication link between a functioning human brain and the outside world. These are electronic interfaces with the brain, which has the ability to send and receive signals from the brain. BMI uses brain activity to command, control, actuate and communicate with the world directly through brain integration with peripheral devices and systems. The signals from the brain are taken to the computer via the implants for data entry without any direct brain intervention. BMI transforms mental decisions and/or reactions into control signals by analyzing the bioelectrical brain activity.

Brain implants, often referred to as neural implants, are technological devices that connect directly to a biological subject's brain - usually placed on the surface of the brain, or attached to the brain's cortex. A common purpose of modern brain implants and the focus of much current research is establishing a biomedical prosthesis circumventing areas in the brain that have become dysfunctional after a stroke or other head injuries. This includes sensory substitution, e.g., in vision. Other brain implants are used in animal experiments simply to record brain activity for scientific reasons. Some brain implants involve creating interfaces between neural systems and computer chips. This work is part of a wider research field called brain-computer interfaces. (Brain-computer interface research also includes technology such as EEG arrays that allow interface between mind and machine but do not require direct implantation of a device Neural-implants such as deep brain stimulation and Vagus nerve stimulation are increasingly becoming routine for patients with Parkinson's disease and clinical depression respectively, proving themselves as a boon for people with diseases which were previously regarded as incurable.

Puzzle Corner

The school children were returning to their homes when they met the mathematical milkman, who propounds the following problem:

In one of the two cans there is milk which is so rich with cream that it becomes absolutely necessary to dilute it with a little water to make it wholesome.

Therefore, in the other can there is some pure spring water, now I proceed to pour spring water from can No. 1 into can No. 2 sufficient to double its contents, and then repour from No. 2 into No.1 enough of the mixture to double the contents.

Then to equalize matters, I again pour from No. 1 into No. 2 to double the contents of No. 2 and find the same number of gallons of milk in each can, although there is one more gallon of water in can No. 2 than there is milk, so I want you to tell me how much more water than milk is there in can No. 1?

Solution:

Suppose, in the beginning there was x gallons of spring water in can No 1 and y gallons of milk in can No. 2 then,

	can No. 1	can No. 2
In the Beginning	x gallons of water	y gallons of milk
After doubling contents of Can 2	x-y water = x-y, milk = 0	2y water = y, milk = y
After doubling contents of Can 1	2(x-y) water = 2(3/4)(x-y), milk = 2(1/4)(x-y)	2y-(x-y) i.e. (3y-x) water = (1/2)(3y-x), milk = (1/2)(3y-x)
After doubling contents of Can 2	2(x-y)-(3y-x) i.e. (3x-5y) water = (3/4)(3x-5y), milk = (1/4)(3x-5y)	2(3y-x) water = (5/4)(3y-x), milk = (3/4)(3y-x)

Now, we know that the number of gallons of Milk in Can 1 = number of gallons of Milk in Can 2

Hence: (1/4)(3x-5y) = (3/4)(3y-x)
Multiply by 4: 3x-5y = 3(3y-x)
Move x to one side and y to other: 6x = 14y
And so: x = (14/6)y

We ALSO know that the number of gallons of Water in Can 2 = number of gallons of Milk in Can 2 PLUS 1

Hence (5/4)(3y-x) = (3/4)(3y-x) +1
Multiply by 4: 5(3y-x) = 3(3y-x) + 4
Simplify: 2(3y-x) = 4
Replace "x" with "(14/6)y": 2(3y-(14/6)y) = 4
Simplify: (4/3)y = 4
Hence: y = 3

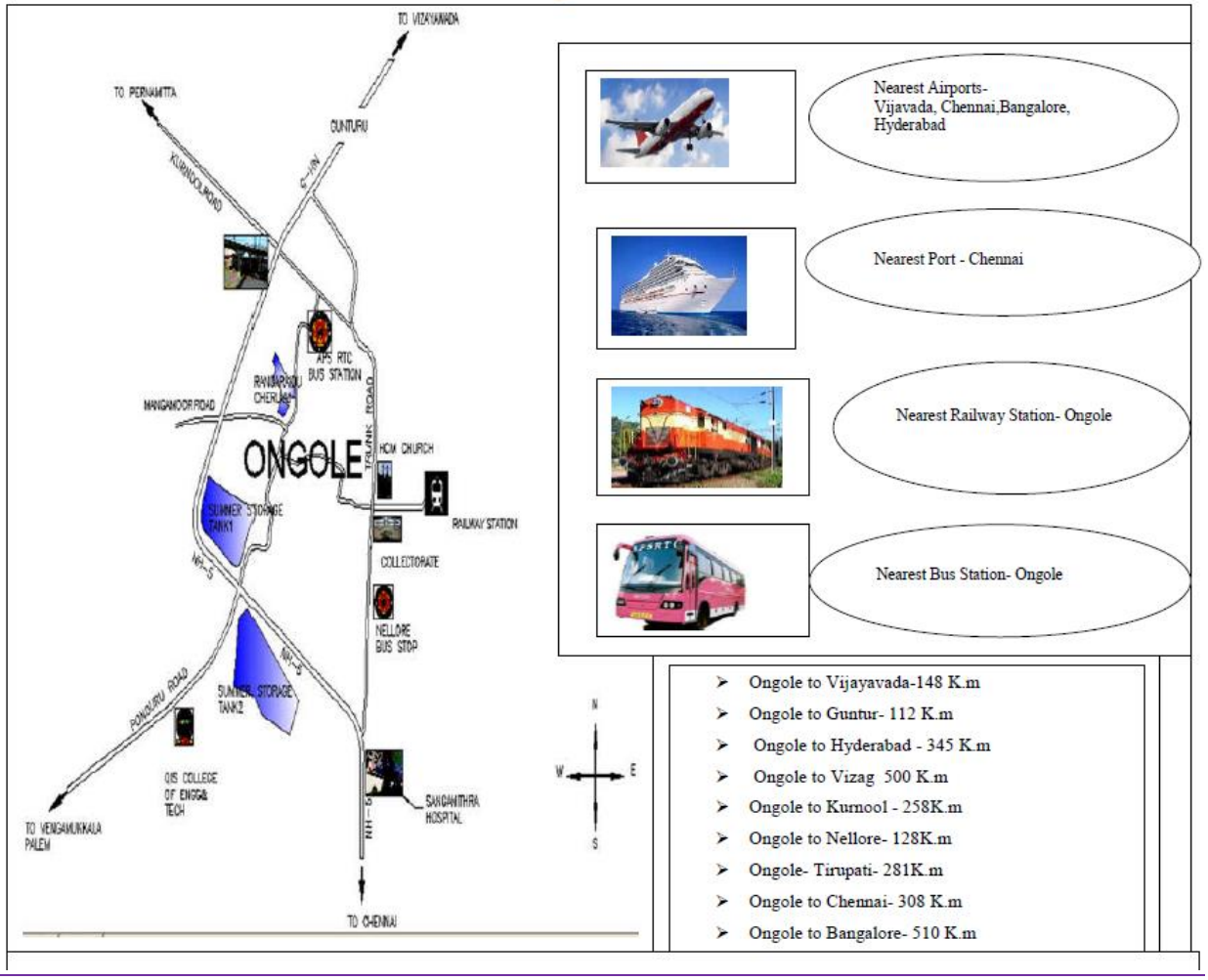
Now we know y=3, we also know that x = (14/6)y = 7

Hence, there was initially 7 gallons of water in can No. 1 and 3 gallons of milk in can No 2.

After all the mixings there would be 4½ gallons of water and 1½ gallons of milk in can No. 1 and 2½ gallons of water and 1½ gallons of milk in can No 2.

Hence, there is 3 more gallons of water than milk in can No 1.

How to Reach QIS, Ongole, AndhraPradesh, India.



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