CSE

NEWS LETTER

Computer Science & Engineering

A Half-Yearly News Letter

TECHNOTHON

July 2013

VISHNU
UNIVERSAL LEARNING
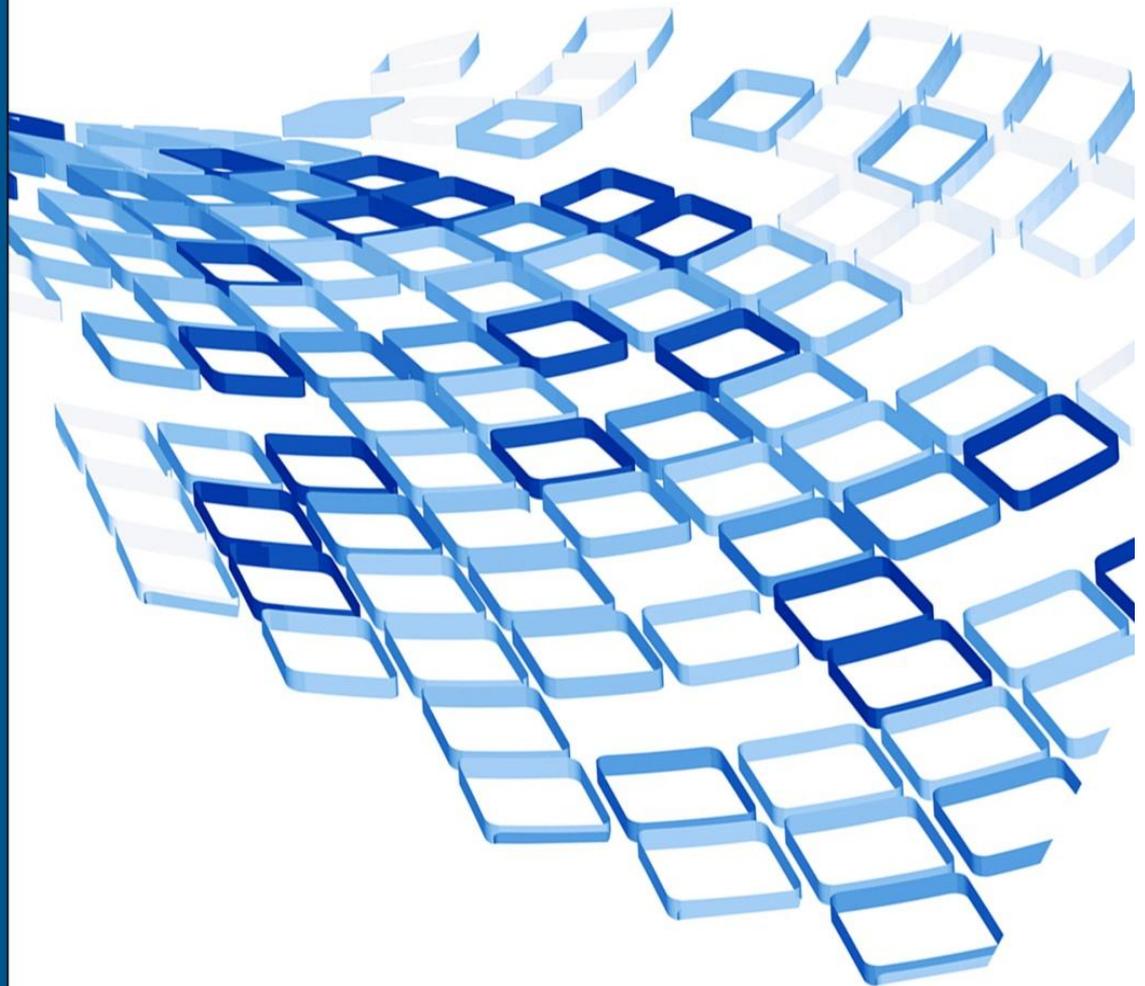
VISHNU INSTITUTE OF TECHNOLOGY
BHIMAVARAM

Vishnu Institute of Technology

Vishnu Institute of Technology, the scion of Shri Vishnu Educational Society was established in 2008 and is currently the eleventh educational institution to disseminate education under the aegis of this society. Nascent that it is, it combines in its matrix the lofty idealism of its Founder Chairman the Late Padmabhushan Dr. B. V. Raju, a distinguished industrialist, philanthropist and an eminent educationalist; the experience and vigour provided by the Chairman Sri K.V. Vishnu Raju, a man of holistic vision and his team comprising dexterous administrators, reputed academicians and brilliant line of students. They constantly strive to make the institution join the ranks of prestigious technical institutions.

Campus

The Campus, sprawling over 100 acres, is located in the verdant atmosphere of Vishnupur in Bhimavaram. It is in the very vicinity of the town and is well connected by road. VISHNU also provides hostel facilities to the students who opt for a residential mode of education. The hostels are constantly updated and provide an atmosphere conducive to pursue education.

Hands on Experience

To make the instruction in VISHNU more practical-oriented, special focus is on hands on experience. The Assistive Technologies Lab run in collaboration

with the University of U Mass, USA helps students to combine technology with a humanistic outlook. Gadgets for the physically challenged are designed and developed here by the students under the guidance of eminent professors both from the Institute and abroad. VISHNU aims at empowering students with technical skills and can-do entrepreneurial spirit. The IBM Software Centre of Excellence in the campus provides the students with the best of quality technical education there by increasing the skill set of each student and faculty for a great career.

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CONTENTS

Department of Computer Science & Engineering

The mission of the department is to advance and enhance computer science engineering fundamentals to build the intellectual capital of students. The CSE Department endeavours to be an important resource centre for the development of computing systems and applications.

The department was established in the academic year 2008-09 with an annual intake of 66. It offers 4 year B.Tech. This program affiliated to JNTU Kakinada & approved by AICTE. The annual intake of CSE branch was increased to 120 from the academic year 2010-11. The department offers M.Tech in Computer Science & Engineering from the academic year: 2012-13. The department has number of well equipped Laboratories and provides excellent facilities for learning.

HELM OF AFFAIRS

The academic year comes to an end in April and a new year begins in June. The wheel turns full circle and is poised for a new beginning. The transition phase between two cycles is very rich in potential with a lot of latent yet dynamic work being done. It is a time for strengthening and enriching the substratum that provides the much needed platform for excellence.

On one hand, it is time for training programmes where the faculty update themselves with the latest trends and techniques in various fields. It is also time to focus on research and go for publications.

Moreover it is a time for academic review where the faculty, having done their teaching, now can look at the teaching learning process in retrospect and plan the prospects. New trends, methodologies can be planned and adopted in accordance with the changing needs and trends of education.

This phase, every year, is marked inevitably by our Chairman's interaction with both the students and the staff. His interaction with the students is always inspiring as he chalks out different ideas and strategies for gaining knowledge and embarking upon a successful career. A mentor to the students he shows them the path to excellence. Similarly, in his interaction with the staff he doles out advice based on his exposure to international standards of education. His vision of providing the best education to the students, to create a knowledge rich environment in the campus coupled with a humane approach sets the goal to the faculty as they form a clear idea as to how to go about their teaching and research.

Seneca says **"Every new beginning comes from some other beginning's end"**.

Let's take advantage of the new academic year and make the best out of it.

Progressive Strides

While the academic year came to an end in April for II, III and Final Btech students, for M Tech students and students of I B Tech it is intra semester break after the I MID from 6 to 20 May. Meanwhile the seniors were given a farewell by their juniors.

Classwork

I B Tech classwork for the second Sem started on 4 March 2013. It will be held until 13 July 2013.

II Sem classwork started also for M Tech students on 29 April 2013.

Inspection

The JNTU fact finding Committee visited our campus on 8 April.

Ratifications

Staff Ratifications were done at JNTU K from 27 to 30 April 2013.

Foreign Languages

German A1 level training was imparted to the students of I B tech from 20 to 30 May 2013. The training was provided by Language Labs Chennai.

Department Activities

Mission R & D Preliminary exam for 3rd B.Tech students of CSE Selected 11 Members on 28-06-2013.

A workshop on JDBC is organized to III B.Tech CSE students on 12-03-13 by TalentSprint team

Seminar on IBM-TGMC projects is organized on to III & IV CSE students (by Mallikarjun from Global Talent Track Pvt Ltd) on 15-03-13

Mr. T Siva Rama Krishna, Assistant Professor, CSE

Department, JNTU-Vijayanagaram gave Guest Lecture on Signals & Interprocess Communication (in Unix) to III B.Tech CSE

Dr. Y S S R Murthy gave guest lecture on "Software Engineering" to II B.Tech CSE students

Summer training program on "Web Technologies" for II B.Tech students between 13-05-13 to 31-05-13.

Workshop on python between 11-02-13 to 13-02-13 to III B.Tech students.

Workshop on JDBC was organized to III B.Tech CSE students on 12-03-13 by TalentSprint team.

Workshop on IBM Technologies was organized to III & IV CSE students by Mallikarjun from Global Talent Track Pvt Ltd on 15-03-13.

Faculty Activities

Ms. P Naga Priyanka attended workshop on "Mobile Computing" at BVRIT, Narsapur between 23-05-13 to 30-05-13

Mr. G Rajesh attended workshop on "Computer Networks" at BVRIT, Narsapur between 27-05-13 to 01-06-13.

Placement Activities

Several students were recruited in the placement drives in our college and about 70 students got selected in various companies

Regd.No.	Student Name	Company
10PA1A0563	KOTHAPALLI HONEY	Vizag Steel Plant
10PA1A0528	CH LEELA VANI	SIDDARTH SOFT
10PA1A0519	CHALLA KARISHMA	SIDDARTH SOFT
10PA1A0556	K PREETHI	SIDDARTH SOFT
10PA1A0517	B N L KRANTHI	SIDDARTH SOFT
10PA1A0557	K VYSHNAVI	BHEL, MACHILIPATNAM
10PA1A0593	P N K PRASANTHI	BSNL, HYD
10PA1A0591	P S SINDHURA	BSNL, ELURU
10PA1A0559	K ROJA RANI	BSNL, ELURU
10PA1A0594	P SAI KIRAN	NAVI SOFT, BANGALORE
10PA1A05A2	SAGI MANJUSHA	

Student Activities

12 of II & III CSE students participated in various events as part of PROMETHAN-2013 (held between 14-03-13 and 15-03-13) at BVRIT.

Md. Asma of II B.Tech CSE (11PA1A0561) won 2nd prize in Paper Presentation at PROMETHAN-2013.

8 of II B.Tech CSE students participated in various workshops at SRKR engineering college, Bhimavaram as part of TECHFLEET-2013 between 19-03-13 and 20-03-13.

III B.Tech CSE students went to Educational tour (south india) between 01-03-13 to 08-03-13

N Sravanthi of III B.Tech CSE exhibited project at ICDCIT (International Conference on Distributed Computing and Internet Technology) between 06th – 09th February 2013

Mr.P Sai Kiran & Dinesh Krishna Reddy of III B.Tech CSE gave presentation on photoshop features as part of COGNOSCENTE activities on 19-02-13.

24 students participated in Assistive Technology Lab (ATL) in the month of July

12 of II & III CSE students participated in various events as part of PROMETHAN-2013 (held between 14-03-13 and 15-03-13) at BVRIT.

8 of II B.Tech CSE students participated in various workshops at SRKR engineering college, Bhimavaram as part of TECHFLEET-2013 between 19-03-13 and 20-03-13.

Articles

Cloud Computing

**By—M. Ravi Teja
IV CSE**

Buying computers for everyone isn't enough -- you also have to purchase software or **software licenses** to give employees the tools they require. Let's say you're an executive at a large corporation. Your particular responsibilities include making sure that all of your employees have the right hardware and software they need to do their jobs. Whenever you have a new hire, you have to buy more software or make sure your current software license allows another user. It's so stressful that you find it difficult to go to sleep on your huge pile of money every night.

Instead of installing a suite of software for each computer, you'd only have to load one application. That application would allow workers to log into a Web-based service which hosts all the programs the user would need for his or her job. Remote machines owned by another company would run everything from e-mail to word

processing to complex data analysis programs. It's called **cloud computing**, and it could change the entire computer industry.

In a cloud computing system, there's a significant workload shift. Local computers no longer have to do all the heavy lifting when it comes to running applications. The network of computers that make up the cloud handles them instead. Hardware and software demands on the user's side decrease. The only thing the user's computer needs to be able to run is the cloud computing system's **interface software**, which can be as simple as a Web browser, and the cloud's network takes care of the rest.

There's a good chance you've already used some form of cloud computing. If you have an e-mail account with a Web-based e-mail service like Hotmail, Yahoo! Mail or Gmail, then you've had some experience with cloud computing. Instead of running an e-mail program on your computer, you log in to a Web e-mail account remotely. The software and storage for your account doesn't exist on your computer -- it's on the service's computer cloud.

When talking about a cloud computing system, it's helpful to divide it into two sections: the **front end** and the **back end**. They connect to each other through a network, usually the Internet. The front end is the side the computer user, or client, sees. The back end is the "cloud" section of the system.

The front end includes the client's computer (or computer network) and the application required to access the cloud computing system. Not all cloud computing systems have the same user interface. Services like Web-based e-mail programs leverage existing Web browsers like Internet Explorer or Firefox. Other systems have unique applications that provide network access to clients.

On the back end of the system are the various computers, servers and data storage systems that create the "cloud" of computing services. In theory, a cloud computing system could include practically any computer program you can imagine, from data processing to video games. Usually, each application will have its own dedicated server.

A central server administers the system, monitoring traffic and client demands to ensure everything runs smoothly. It follows a set of rules called **protocols** and uses a special kind of software called **middleware**. Middleware allows networked computers to communicate with each other. Most of the time, servers don't run at full capacity. That means there's unused processing power going to waste. It's possible to fool a physical server into thinking it's actually multiple servers, each running with its own independent operating system. The technique is called server virtualization. By

maximizing the output of individual servers, server virtualization reduces the need for more physical machines.

If a cloud computing company has a lot of clients, there's likely to be a high demand for a lot of storage space. Some companies require hundreds of digital storage devices. Cloud computing systems need at least twice the number of storage devices it requires to keep all its clients' information stored. That's because these devices, like all computers, occasionally break down. A cloud computing system must make a copy of all its clients' information and store it on other devices. The copies enable the central server to access backup machines to retrieve data that otherwise would be unreachable. Making copies of data as a backup is called **redundancy**.