CSE
Computer Science & Engineering
A Half-Yearly News Letter
TECHNOTHON
January 2013
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.
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.
Truly this season of rains had brought lots and lots of overflowing activities in the campus with cool breeze and thunders indeed just like our students at working sessions.

It is said that learning must be a way of being – an ongoing set of attitudes and actions by individuals and groups that they employ to try to keep abreast of the surprising, novel, overwhelming and recurring events. This is particularly true with the exponential advancements in learning.

This time its raining seminars, conferences and workshops in the campus. Keeping in touch with the emerging trends is a must to survive in this world of knowledge explosion. Learning content and methodologies are changing. Know-how and know-what is being supplemented with know-where (the understanding of where to find knowledge needed). The learners also need to learn how to learn. Our campus is rich in these academic activities with the faculty and students actively participating in Workshops, Seminars and Conferences, both National and International. This has also been matched with publications.

**Progressive Strides**

**Chairman’s Visit**

Chairman Shri K.V. Vishnu Raju visited the campus on 7 August. He addressed the final B Tech students regarding training and placements. In his address he explained the importance of campus placements, the need to acquire industry compatible skills, and motivated them to train themselves well and participate in the training and placement activities. He assured them maximum support from the college.

Earlier he visited the ATL Lab at VIT and observed the activities going on there. He interacted with the students and staff involved in the ATL lab giving them the much needed motivation.

**Foreign Languages**

The second phase of A1 level in German was held between 4th July to 8th July’12 by Mr.M.Satish Kumar, Languages Labs, Chennai. The course was completed and the final exam was conducted. 22 members qualified in the end examination.

**Department Activities**
A five day workshop on “Embedded Systems” was organized by the departments of CSE and IT at VIT. This is the first such Workshop at VIT organized by the Indo-United States Consortium for Engineering Education (IUCEE) Faculty Leadership Initiative (FLI) in the year 2012. The workshop was conducted by Dr. Santosh Pande, Professor, CSE from Georgia Tech University, Atlanta, USA.

A total of 40 participants attended the workshop from the various departments of CSE, IT and ECE from different colleges. The programme was targeted at teaching faculty of Undergraduate and Post graduate courses. Interested students also participated in the programme.

The workshop benefited the faculty as it exposed them to the current trends in Embedded Systems.

Mr. M. Suresh Babu, Assoc. Prof, department of CSE presented a paper on “In Silico Survey of Distribution and Frequency of Imperfect Microsatellite Repeats in Viral Genomes” in a conference held from 18th to 20th July’12 at Cochin University of Science & Technology, Kochi, Kerala.

Dr. D. Suryanarayana convened a meeting with Mr. Kantha Reddy, HODs and the members of the Research Activities committee on 30 August 2012.

Guest Lecture by Mr. Dattatreya Piyush Sharma, Director – GuruPrevails on Machine Learning III CSE & IT Students on 22-12-12

DB2 Associate Certification Exam by Mr Sami, IBM- Pune Number of Students taken Examination – 64 (5 students were absent) – qualified – 49 Number of Faculty Members – 5 (qualified – 5)

Organized Staff Development Programme on “Recent Trends in Data mining and Warehousing” between Dec-5th and Dec-17th, 2012.

40 days training program .NET in Summer Vacation – 2012 in the college for the students

Internal training on IBM RAD Tools between 20th – 30th August 2012.

Organized a two day workshop on ANDROID between 16th & 17th September 2012 for the students. 60 students from VIT & BVRICE participated in the workshop. Mr. P C Varma from NetEnrich acted as resource person.

Organized three day workshop on IBM-DB2 between 16th & 18th
December 2012 for the CSE & IT students of VIT. Mr. Abhinav Pandey and Mr. Charan Kumar Reddy from WebTek Labs Private Limited, New Delhi acted as resource persons.

organized Guest Lecture on “Artificial Intelligence Applications” on 22nd December 2012. Mr. Dattatreya Piyush Sharma, from GuRu Prevails- Bangalore, gave an overview of various application areas of Artificial Intelligence.

Forty nine students (III & IV B.Tech CSE,IT) & Five faculty members of CSE & IT were certified in DB2 Academic Associate Examination conducted by IBM on 27-12-12.

Department hosted Preliminary test for National Programming League (NPL) as part of NIT Warangal’s TECHNOZION’12

Mr. Siva Shankar from Loment Technologies, Hyderabad gave brief introduction about software products – walnet, peanut, cashewnut – used in security to the faculty members

Department Software Club (CognoScentE) Activites

03-08-12 - Inauguration & Live Streaming using Ustream – by Mr. R Srinivasa Raju

25-08-12 – C Quiz

04-08-12 – Blog Creation – Mr. Charan Kumar – III B.Tech CSE

07-09-12 - Faculty Presentations: BIG DATA – Mr. M Suresh Babu

**Student Activities**

III CSE K Naresh, CH Rama Siva, B Charan Kumar, B Vamsi Krishna attended workshop on python at swarnandhra engg college, narsapur between 04-12-12 to 06-12-12

II CSE CH Mounika (11PA1A0512), B Keerthi (11PA1A0503), M Sai Lakshmi (11PA1A0563) presented a paper on Blue Brain at GIET, Rajahmundry on 15-12-12

80 students from III & IV CSE & IT participated in the workshop IBM-DB2 workshop by Mr. Abhinav Pandey and Mr. Charan Kumar Reddy from WebTek Labs Pvt. Lab, New Delhi from 16-12-12 to 18-12-12

Eight students from III B.Tech CSE taken IBM RAD Tools Exam on 04-09-2012 & Seven students were certified.

Mr. S N S Raghu Babu(11PA1A0598) attended a workshop on Ethical Hacking & Cyber Security at SRKR Engineering College between 17th – 18th August 2k12

Mr. Manoj Yakamuru (11PA1A0555) & Mr. CH. Mahesh (11PA1A0510) of II CSE got 1st prize for the CHRONOLOGY event conducted in i-genesis 2012 at
Andhra University between 05-09-12 to 08-09-12

A N V Sai Teja (10PA1A0509) got 3rd prize in spot event – Debugging at Samyak-2k12 @ KLU between 05-10-12 and 06-10-12

Eight of III B.Tech CSE (2010-14) students undergoing Mission R & D training in the Campus

III B.Tech CSE students were taken to BSNL office, Bhimavaram as part of Industry visit on 16-07-12


K.Pranavi Durga of IV B.Tech CSE doing Internship at SemanticSpace

K.Dheeraj Kumar of IV B.Tech CSE doing Internship at AGILIQ

Eleven 4th B.Tech CSE students (2009-13 batch) are doing internship at NetEnrich within the campus

Students Participated in National Programming League (NPL) at NIT Warangal TECHNOZION’12 from 28-09-12 to 30-09-12. In this program our students actively participated as follows

B Charan Kumar III CSE-A (10PA1A0515) – Coordinator

A Surendra Reddy III CSE-A (11PA5A0501) – Volunteer

CH Kumar Vijay Mouli III CSE-A - Volunteer

Students Participated in Cyber Forensics and Exploration workshop at NIT Warangal TECHNOZION’12 from 28-09-12 to 30-09-12. B Charan Kumar (10PA1A0515), A Gopinadh (10PA1A0504).

Students Participated in Web Development Workshop at NIT Warangal TECHNOZION’12 from 28-09-12 to 30-09-12. Ch Sravan Kumar III CSE-A.

Students Participated in Just Google at NIT Warangal TECHNOZION’12 from 28-09-12 to 30-09-12. B Charan Kumar (10PA1A0515), A Gopinadh (10PA1A0504). Ch Sravan Kumar III CSE-A

A N V Sai Teja (10PA1A0509) & K D Nagesh Babu (11PA5A0506) Got 3rd prize in spot event – Debugging at Samyak-2k12 @ KLU from 05-10-12 and 06-10-12.

Research and Development

Mission R&D

Mission R&D exam was conducted on 16-08-12 for III B.Tech I Sem students. In this exam 300
students attended and 10 students qualified. The Training will be given by Mr. Perraju, Ex- employee of Microsoft.

Research Activities
A meeting was held by our Vice Chairman Mr. Ravichandran Rajagopal on 28 August in the campus regarding the R&D activities in the campus. Members interested were identified to be a part of the Research Activity Committee from every college in the campus. Principals, HODs, Senior Faculty members and Associate Professors of all the colleges attended the meeting.

Club Activities
The members of English Empyrean organized an event on 20 July 2012. The events are Toggle, picture interpretation and memory game to enhance speaking ability, vocabulary and fluency over English language through entertainment.

The event started with an inspirational video song. Followed by the events and the winners were Memory game, Toggle and Picture interpretation. The ultimate winner was selected from these three through a Qiz round and was presented a tag “THE HELMER”. Mr. Pradeep of II IT was the helmer.

Future Plans
Pursuing incubation center in association with JKC in the college
Industry visit to Efftronics, Vijayawada & Infosys- Hyd in the month of February, 2013

Articles

MOBILE COMPUTING

By—G.S.G. Pavani
IV CSE

Mobile computing is human–computer interaction by which a computer is expected to be transported during normal usage. Mobile computing involves mobile communication, mobile hardware, and mobile software. Communication issues include ad hoc and infrastructure networks as well as communication properties, protocols, data formats and concrete technologies. Hardware includes mobile devices or device components. Mobile software deals with the characteristics and requirements of mobile applications. Mobile computers are spreading faster than any other consumer technology in history.
Smart phones have even begun reaching the group of relative technophobes that consumer researchers call the “late majority.” About half of mobile-phone users now have one.

Mobile security or mobile phone security has become increasingly important in mobile computing. It is of particular concern as it relates to the security of personal information now stored on the smartphone.

More and more users and businesses use smartphones as communication tools but also as a means of planning and organizing their work and private life. Within companies, these technologies are causing profound changes in the organization of information systems and therefore they have become the source of new risks. Indeed, smartphones collect and compile an increasing amount of sensitive information to which access must be controlled to protect the privacy of the user and the intellectual property of the company.

All smartphones, as computers, are preferred targets of attacks. These attacks exploit weaknesses related to smartphones that can come from means of communication like SMS, MMS, wifi networks, and GSM. There are also attacks that exploit software vulnerabilities from both the web browser and operating system. Finally, there are forms of malicious software that rely on the weak knowledge of average users.

Different security counter-measures are being developed and applied to smartphones, from security in different layers of software to the dissemination of information to end users. There are good practices to be observed at all levels, from design to use, through the development of operating systems, software layers, and downloadable apps.