## CSE DEPARTMENT NEWS LETTER QIS INSTITUTE OF TECHNOLOGY

(Approved by AICTE, New Delhi \& Affiliated to JNTU, Kakinada) (AN ISO 9001: 2008 Certified Institution)
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## TECHNO-FOCUS

 2015-16
## July to Septemer

## Principal's Message



I am happy to note that the editorial board brings out newsletter for the period July to September 2015. 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 skillsets 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

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.

## Guest Lecture

A number of Guest Lectures from various Institutional and Industrial Experts in the field were organized by department OF CSE for in-depth understanding of the subjects. Table shows the list of some guest lecturers organized.

| Date | Topic | Resource person |
| :--- | :--- | :--- |
| $\mathbf{1 4 / 0 7 / 2 0 1 5}$ | Advanced Data Structures | APSAR BASHA, <br> AMAZON,Hyderabad |
| $\mathbf{1 5 / 0 6 / 2 0 1 5}$ | Crack your code, debug and fix your code | Ramkumar, C1X Inc, <br> Chennai |

## Workshop

| Date | Topic | Resource person |
| :---: | :---: | :---: |
| $\mathbf{1 7 / 0 9 / 1 5}$ <br> to <br> $\mathbf{1 9 / 9 / 1 5}$ | Cyber security | Mr. Krishna Reddy, ESF lab, <br> Guntur sponsored by <br> APITA |
| $\mathbf{1 2 / 9 / 2 0 1 5}$ | BASICS OF JAVA | Anvesh, <br> TALENTIO,Hyderabad |

students who participated outside a state

| S.No | Name of the student | Date | Title of the <br> event | College/university <br> \& location |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | PUNATI USHASREE | $9 / 7 / 2015$ | Cyber security | VIT UNIVERSITY, <br> VELLORE |
| $\mathbf{2}$ | SHAIK ARIFA | $9 / 7 / 2015$ | Cyber security | VIT UNIVERSITY, <br> VELLORE |
| $\mathbf{3}$ | SHAIK ARSHIYA | $9 / 7 / 2015$ | Cyber security | VIT UNIVERSITY, <br> VELLORE |
| $\mathbf{4}$ | SHAIK FAIZA SULTHANA | $9 / 7 / 2015$ | Cyber security | VIT UNIVERSITY, <br> VELLORE |
| $\mathbf{5}$ | SHAIK SUNAINA BEE | $9 / 7 / 2015$ | Cyber security | VIT UNIVERSITY, <br> VELLORE |
| $\mathbf{6}$ | THATIPARTHI SWATHI | $9 / 7 / 2015$ | Cyber security | VIT UNIVERSITY, <br> VELLORE |
| $\mathbf{7}$ | PUNATI USHASREE | $9 / 7 / 2015$ | Cyber security | VIT UNIVERSITY, <br> VELLORE |

## Placement Training

| S.NO | Date of the <br> Event | Resource person | Details of training Program |
| :---: | :---: | :---: | :---: |
| $\mathbf{1 5 . 9 . 2 0 1 5}$ | Mr.Chandu <br> Krishna | Java Training Program | 15.9 .2015 |
| $\mathbf{3 1 . 8 . 2 0 1 5}$ | Mr.Narasimha | C Language Training | 31.8 .2015 |
| $\mathbf{2 7 . 7 . 2 0 1 5}$ | Mr.Nagveer | Campus Recruitment | 27.7 .2015 |

Training Classes on GIS \& Infoview Placement Drive


## PROGRAMS CONDUCTED BY EDC

| S.NO | Name of the <br> Resource person | Name of the Event | Beneficiary | Date of the <br> Event |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | Mr. D. Krishna <br> Reddy, Relationship <br> Manager, Birla Asset <br> managenment <br> company Itd, vizag | Workshop on Business \& Wealth <br> Management | Students of <br>  <br> different <br> branches | 21.08 .2015 |
| $\mathbf{2}$ | Dr. P. Hari Babu, <br> ANU PG CENTER, <br> Ongole | Awareness on E-Marketing | Registered <br> Students from all <br> Departments | 19.09 .2015 |


| Name of the Student | Name of the Event | Position/Priz |
| :---: | :---: | :---: | :---: |
| e |  |  | Awarded by

## Technical Article

## PyTorch

PyTorch is defined as an open source machine learning library for Python. It is used for applications such as natural language processing. It is initíally developed by Facebook artificial-intelligence research group, and uber's pyro software for probabilistic programming which is built on it.

Originally, PyTorch was developed by Hugh Perkins as a Python wrapper for the Lus)IT based on Torch framework. There are two P YTorch variauts.

PyTorch redesigns and implements Torch in Python while sharing the same core c Libraries for the backend code. PyTorch developers tuned this back-end code to run Python efficiently. They also kept the GPU based hardware acceleration as well as the extensibility features that made Lua-based Torch.

## Features

The major features of P YTorch are mentioned below -
Easy interface - PyTorch offers easy to use API; hence it is considered to be very simple to operate and runs on Python. The code execution in this frameworle is quite easy.

Python usage - This Library is considered to be Pythonic which smoothly integrates with the Python data science stack. Thus, it can leverage all the services and functionalities offered by the Python environment.
computational graphs - pytorch provides an excellent platform which offers dynamic computational graphs. Thus a user can change them during runtime. This is highly useful when a developer has no idea of how much memory is required for creating a neural network model.

PyTorch is known for having three levels of abstraction as given below -

- Tensor - imperative n-dimensional array which runs on GPU.
- Variable - Node in computatíonal graph. This stores data and gradient.
- Module - Neural network layer which wíll store state or learnable weights.

Advantages of Py Torch
The following are the advantages of PyTorch -

- It is easy to debug and understand the code.
- It includes many layers as Torch.
- It íncludes lot of loss functions.
- It can be consídered as Numpy extension to GPUS.
- It allows building networles whose structure is dependent on computation itself.


## UJRUSES ARE GOOD FOR YOU

Spawn of The Devil, computer viruses May Help us Realize The Full Potential of The Net. What scares You Most About Getting That Virus?

Is it The Prospect of Witnessing Your System's Gradual Decay, One Nagging symptom Following Another until one Day The Whole Thing comes To A Halt? is it The SelfRecrimination, All The Useless Dwelling on How Much Easier Things Would Have Been if Only You'd Protected Yourself, if Only You'd Been More careful About whom You Associated With?

Or is it Not, In Fact, Something Deeper? Could it Be That What Scares You Most About The Virus is Not Any Particular Effect it Might Have, But Simply its Assertive, Alien Presence, its intrusive Otherness? Inserting itself into A complicated choreography of subsystems All Designed To serve Your Needs And carry out Your Will, The virus Hews To Its Own Agenda of Survival And Reproduction. Its Oblivious Self-interest vidates The unity of Purpose That Defines Your System As Yours. The Virus Just Isn't, Well, You. Doesn't That Scare You?

And Does it Really Matter Whether The Virus in Question is A Biological or An Electronic One? It should, of course. The Analogy That Gives computer Viruses Their Name is Apt Enough To Make Comparing Bioviruses And Their Digital Analogs An interesting Proposition, But it Falls short in one Key Respect. Simply Put, The Only way To Fully understand The Phenomenon of Autonomonsly Reproducing computer Programs is To Take into Account Their One Essential Difference From Organic Life Forms: They Are Products Not of Nature But of Culture, Brought Forth Not By The Blind Workings of A Universe indifferent To Our Aims. But By The conscions Effort of Human Beings Like ourselves.

Why Then, After A Decade of coexistence With Computer Viruses, Does Our Default Response To Them Remain A Mix of Bafflement And Dread? Can it Be That We Somehow Refuse To Recognize in Them The Traces of Our Fellow Earthlings' Shaping Hands And Minds? And If we could Shake Those Hands And Get Acquainted With Those Minds, Would Their Creations scare us Any Less?

These Are Not Idle Questions. Overcoming Our Fear of Computer Viruses May Be The Most important step We can Take Toward The Future of information Processing. Someday The

Net Will Be The Summation of The World's Total computing Resources. All Computers Wíll Link up into A Chaotic Digital soup in Which Everything is connected - Indirectly Or Directly - To Everything Else. This Coming Net of Distributed Resources Will Be Tremendously Powerful, And Tremendously Hard To Harness Because of its Decentralized Nature. It Will Be Ecology of computing Machines, And Managing it Will Require An Ecological Approach.

Many of The Most Promising Visions of How To coordinate The Far-Flung communication And computing cycles of This Emerging Platform Converge on A controversial solution: The use of Self-Replicators That Roam The Net. Free-Ranging, self-Replicating Programs, Autonomous Net Agents, Digital Organisms - Whatever They Are called, There's An Old Fashion Word For Them: Computer Viruses.

Today Three Very Different Groups of Heretics Are creating computer Viruses. They Have Almost Nothing To Do With Each Other. There Are Scientists interested in The Abstract Behaviors of self-Replicating codes. There Are Developers interested in Harnessing The Power of Self-Replicating Programs, And There Are unnamed Renegades of The VirusWriting underground.

Although They Share No common Experience, All These Heretics Respect A computer Virus For its Irrepressible Mobility, For The self-centered Autonomy it wrests From A computer Environment, And For The Surprising Agility with Which it Explores Opportunities And Possibilities. In Short, Virus Enthusiasts Relate To The Virus As A Fascinating And Powerful Life Form, Whether For The Fertile Creation of Yet More Powerful Digital Devices, As An Entity For Study in Itself, Or, in The case of One Renegade Coder, For Reckless Individual Expression.

## Duzzle corner

Big Jim, engineer of the Oval Express says: "We blew off a cylinder head an hour after leaving the station and had to continue the trip at three-fifths of the former speed, which brought us in two hours late. If the accident had occurred fifty miles farther on, the train would have arrived forty minutes sooner".

How long was the run between stations?

## Solution:

If the train takes $x$ minute to cover 50 miles then its full-speed would be $50 / x$ miles per hour and it's speed after blowing one of the cylinder would be $50 /(x+40)$ miles per hour.

Therefore, $(3 / 5)$ of $(50 / x)=50 /(x+4 x)$ gives $X=60$ minutes or one hour; i.e. the full-speed of the train was 50 miles per hour and its three- fifth speed was 30 miles per hour.

Suppose, the train needed to cover y miles when the cylinder blew. Then, $\{(y / 50)+2\}$ hour $=y / 30$ hour gives $y=150$ miles. Since, the train already had covered 50 miles at full-speed before the cylinder blew, so the run between the stations was $50+150=200$ miles.

How to Reach QIS, Ongole, AndhraPradesh, India.


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