

ABOUT IEEE (INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS)

IEEE, an association dedicated to advancing innovation and technological excellence for the benefit of humanity, is the world's largest technical professional society. It is designed to serve professionals involved in all aspects of the electrical, electronic, and computing fields and related areas of science and technology that underlie modern civilization. IEEE's roots go back to 1884 when electricity began to become a major influence in society. There was one major established electrical industry, the telegraph, which since the 1840s had come to connect the world with a data communications system faster than the speed of transportation. The telephone and electric power and light industries had just gotten underway.

Image Processing

Image processing is now routinely used by a wide range of individuals who have access to digital cameras and computers. With a minimum investment, one can readily enhance contrast, detect edges, quantify intensity, and apply a variety of mathematical operations to images. Although these techniques can be extremely powerful, the average user often digitally manipulates images with abandon, seldom understanding the most basic principles behind the simplest image-processing routines. Although this may be acceptable to some individuals, it often leads to an image that is significantly degraded and does not achieve the results that would be possible with some knowledge of the basic operation of an image-processing system. Intelligence plus character- that is the goal of true education.

-NANAM VAISHNAVI
(17881A0556)
3rd Year,CSE

ABOUT IEEE CS (COMPUTER SOCIETY)

IEEE Computer Society is the leading provider of technical information, community services and personalized services to the world's computing and computer science professionals. IEEE Computer Society strives to be essential to the global technical community and computer professionals everywhere and be universally recognized for the contributions of technical professionals in researching, developing, and applying technology to improve global conditions. The Computer Society serves the information and career-development needs of today's computing researchers and professionals with books, conferences, conference publications, magazines, online courses, software development certifications, standards, and technical journals. Known worldwide for its computer-standards activities, the Computer Society promotes an active exchange of ideas and technological innovation among members and technology companies producing today's innovative products and services. Teaching more than 100,000 science and technology professionals, the computer society is the largest of IEEE's 38 societies.

The Bioinformatics Group at C-DAC leverages on the inherent technological expertise to delve into complex biological systems and develop an understanding of underlying processes by providing high throughput solutions and services. The group has a dual capability of expertise in advanced areas of research in computational biology along with understanding of High Performance Computing. The activities of the Bioinformatics Group are aimed towards acquiring in-depth knowledge and understanding the various strata of bio-complexity and hence include an entire spectrum of data analyses and essential research consumables.

- S.SHASHI KUMAR
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Soft computing

Soft computing means the idea of computing similarly like Human Beings because Humans and the world are normally soft. It was proposed by Lotfi Zadeh, he is the pioneer of a mathematical concept popularly known as fuzzy sets. It led to many new fields such as fuzzy control systems, fuzzy graph theory, fuzzy systems, and many more. Lotfi Zadeh perceive that Humans are good at 'soft' thinking while computers habitually are 'hard' thinking. 'Soft' computing by contrast embraces chaotic, neural models of computing that are more pliable. Because there is no known single method that lets us compute like humans, soft computing involves using a combination of methods that each bring something helpful to achieve this goal.

- M.D.N.AKASH
(17881A05D6)
3rd Year,CSE

BIOINFORMATICS

"We're in the matrix. We think we see everything, but we don't really know if Google's showing us all."

Bioinformatics is an interdisciplinary field that develops methods and software tools for understanding biological data. As an interdisciplinary field of science, bioinformatics combines computer science, statistics, mathematics, and engineering to analyze and interpret biological data. Bioinformatics has become a buzzword in today's world of science. It has emerged as a combination of both Computer Science and Biology. Researches are being carried out to identify genetic alterations in patients allowing scientists to come up with better treatments and even possible measures of prevention. Bioinformatics has proven to possess great potential to identify diseases beforehand, determine treatment and help make human lives better.

Bioinformatics has become an important part of many areas of biology. In experimental molecular biology, bioinformatics techniques such as image and signal processing allow extraction of useful results from large amounts of raw data. In the field of genetics, it aids in sequencing and annotating genomes and their observed mutations. It plays a role in the text mining of biological literature and the development of biological and gene ontologies to organize and query biological data. It also plays a role in the analysis of gene and protein expression and regulation. Bioinformatics tools aid in the comparison of genetic and genomic data and more generally in the understanding of evolutionary aspects of molecular biology. At a more integrative level, it helps analyze and catalogue the biological pathways and networks that are an important part of systems biology. In structural biology, it aids in the simulation and modeling of DNA.

Bioinformatics has proven to possess great potential to identify diseases beforehand, determine treatment and help make human lives better. With the inspiration and knowledge of computer science, fields such as gene technology, medicine and healthcare can evolve from curing individual patients to healing entire populations.

Mallellu Sai Prashanth(17881A0537)

3rd Year CSE A

DESIGN OF HUMAN COMPUTER INTERFACE FOR HAND WRITING CHARACTER

Humans acquired a special skill of having an ability to communicate. This is one of the key features that make humans different from animals. Handwriting is one of the methods used to communicate with others. It plays an important role in learning and also in analyzing one's personality. Through detailed analysis it was found that the communication can be improved effectively through Human and computer interactions. Human computer interactions is defined as study of computer technology and in precise the interactions between human and computer. Human computer interaction has been a major field of research because of its vast applications and interdisciplinary methodologies. One of the fields in which Human computer interactions are used are in handwriting characters.

One of the conventional methods of handwriting tools is a brush pen which is used to write calligraphy in schools in Japan. This requires a lot of skill like maintaining speed of strokes, good balance line width and an angle of contact area. The study is focused on the hand writing characters using a brush pen is that it requires skills like ability to grasp, accuracy, quickness of movement which are almost equal to the skills that are required for sports and science. Generally a brush pen is used with black ink or with water on the colored papers and reuse them by clearing the characters when the paper is dried. For writing good characters right stroke order and speed is very much necessary. The characters that are written by the computer device is similar to characters written with ball pen or pencil on a piece of paper.

P Satya Harika(18881A05N7)

2nd Year CSE D

STUDENT ACHIEVEMENTS

- Niharika, student from CSE-4th year, who is IEEE volunteer has awarded Richard E Merwin award with a cash prize of 1000 \$.
- Mr. MALLELLU SAI PRASHANTH, student from III year CSE for his selection as brand ambassador for IEEEExtreme 13.0 Ambassadors program under Asia Pacific region. IEEEExtreme 13.0 is a world wide programming contest.
- MALLELLU SAI PRASHANTH, Jinna Hrudaya Reddy , P Satya Harika, Dharmarajula Ajay, from Team HASH'19, Volunteers of Vardhaman Student Branch won the award in Presenting payload idea titled "AIRCRAFT MONITORING" at VARDHAMAN STUDENT SATELLITE OBJECTIVE CONTEST Finals, held in Hyderabad on 17th-18th July 2019.
- MALLELLU. SAI PRASHANTH of CSE-3rd year, has been Bagged Second PRIZE in the "BEST INNOVATION PITCH-HYDERABAD" conducted by International Institute Of Information Technology, Hyderabad (IIIT-Hyderabad) in the ATAL INNOVATION MISSION CONTEST, NITI AAYOG on 25th JUNE 2019.
- Tarun Pothulapati secured "GOOGLE SUMMER OF CODE 2019 Internship" at Linkerd and he also received a Scholarship to attend KubeCon and CloudNativeCon which held in Barcelona in may 2019.
- MALLAREDDY DURGA NAGENDRA AKASH of CSE-3rd year, has been Bagged Prize in BIZHACK BOOTCAMP conducted by TIE HYDERABAD on 2nd June 2019.
- Sri Pravan Paturi , MD Burhanuddin Skaikh , P Tarun Reddy, Khalid Roshan, Shreya Srivastava from Team Utor AI, Students of CSE-4th Year won the "BEST PRESENTATION SKILLS" and "BEST ELEVATOR PITCH" awards at TIE Grad 2019 Finals, held in Hyderabad on March 2019.
- MALLELLU. SAI PRASHANTH of CSE-2nd year, has been awarded FIRST PRIZE in the "NATIONAL LEVEL TECHNICAL FEST" conducted by Indian Institute Of Technology, Hyderabad (IIT-Hyderabad) in the TECHNICAL PAPER PRESENTATION CONTEST on 18th february 2019.

Upcoming Events

11th International Conference on Soft Computing and Pattern Recognition (SoCPaR 2019) (www.mirlabs.net/SoCPaR19)

SoCPaR 2019 is organized to bring together worldwide leading researchers and practitioners interested in advancing the state of the art in Soft Computing and Pattern Recognition, The themes for this conference are thus focused on "Innovating and Inspiring Soft Computing and Intelligent Pattern Recognition".

The conference is expected to provide an opportunity for the researchers to meet and discuss the latest solutions, scientific results and methods in solving intriguing problems in the fields of soft Computing and Pattern Recognition. The General Chairs, along with the entire team cordially invite you to submit your latest research results and to take part in the upcoming conference, to be held during December 13-15, 2019 in Hyderabad, India.

11th World Congress on Nature and Biologically Inspired Computing (NaBIC 2019) (www.mirlabs.net/nabic19)

.The 11th World Congress on Nature and Biologically Inspired Computing (NaBIC 2019) to be held in Hyderabad, India during December 13-15, 2019. NaBIC 2019 is organized to provide a forum for researchers, engineers, and students from all over the world, to discuss the state-of-the-art in machine intelligence, and address various issues on building up human friendly machines by learning from nature. The conference theme is "Nurturing Intelligent Computing Towards Advancement of Machine Intelligence".

OUR SB ACTIVITIES

IEEE Computer Society Vardhaman Chapter has a comprehensive and vibrant schedule of events which are being hosted this academic year. This chapter is targeting the most happening tech in the computer science world and is hosting workshops on these cutting edge technologies.

The chapter has so far hosted hands on workshops on "Web-Technologies" and "Azure /Docker/kubernetes", with many more to come this year.

Two-day Workshop Technical Manuscript Preparation with LATEX

LaTeX is widely used in academi for the communication and publication of scientific documents in many fields, including mathematics,engineering, economics and political science. It also has a prominent role in the preparation and publication of books and articles that contain complex multilingual materials.

-12th-13th March 2019.

Two-week Workshop on Web Technologies Workshop

The aim of the workshop was to teach Web Technologies like HTML, CSS, Basic JAVA SCRIPT and hosting their own website using Github to students from different departments.It was a complete hands-on session so as to make students to learn in a completely different fashion opposite to regular learningThe workshop was attended by 34 students from various departments in Vardhaman College of Engineering.

-26th JUNE - 10th JULY 2019

One Day Workshop on "Azure,Docker,Kuburnetes"

Azure Kubernetes Service is a managed container orchestration service, based on the open source Kubernetes system, which is available on the Microsoft Azure public cloud. An organization can use AKS to deploy, scale and manage Docker containers an container-based applications across a cluster of container hosts.Containers are isolated from one another and bundle their own software, libraries and configuration files; they can communicate with each other through well-defined channels.All containers are run by a single operating-system kernel and are thus more lightweight than virtual machines. Containers are created from images that specify their precise contents. Images are often created by combining and modifying standard images downloaded from public repositories.CSE 2nd and 3rd Year students who enrolled and attended for the workshop.

- 16th July 2019

COMMITTEE

- **Dr. K. Mallikharjuna Babu- Director & CEO, VCE**
- **Dr. S. Sai Satyanarayana Reddy - Principal,VCE**
- **Dr. M.A.Jabbar - IEEE Student Branch Advisor-VCE SB**
- **Dr.Rajanikanth Aluvalu-, HOD,CSE**
- **Sri Pravan Paturi-Chair**
- **V. Niharika-Vice Chair**
- **Md. Burhanuddin Shaikh-Secretary**
- **M. Sai Prashanth-Treasurer**
- **N. Vaishnavi-Joint Treasurer**
- **M. D. N. Akash-Event Coordinator**
- **S. Shashi Kumar-Chief Editor**
- **N. Puneeth-Webmaster and Editor**

IEEE Vardhaman Student Branch Orientation

IEEE Computer Society Vardhaman Student Chapter organized an orientation for Students of Computer Science And Engineering . The main motto is to make students get a basic idea about IEEE and our academic plan about what we are going to do throughout the year. We came up with some fun events to cheer them up and get them involved. We inserted our main ideas in between the events with a properly planned schedule and were able to make them know about IEEE.At the end, the orientation was concluded by showing the current IEEE VARDHAMAN council members to the students. All the members finally requested the students to make use of all the facilities and get accustomed to the college and get involved in the student chapters.

-15th July 2019