



WE CREATE

WE STIMULATE

WE EMULATE

Dhanekula

Institute of Engineering & Technology

TECHNICAL MAGAZINE

COMPUTER SCIENCE
& ENGINEERING

BYTES

2017-2018



NBA Accredited B.Tech Courses: CE | ME | ECE
Accredited By NAAC



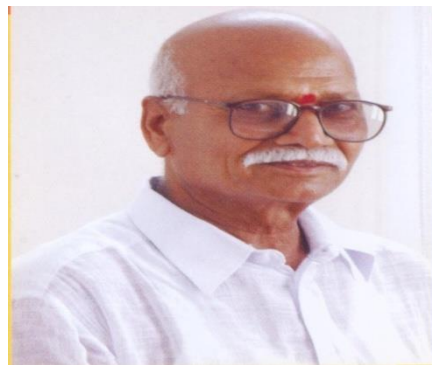
DHANEKULA INSTITUTE OF ENGINEERING AND TECHNOLOG

DhaneKula Institute of Engineering & Technology, established in the year 2009 is the first of its kind Technical Institute founded by Sri DhaneKula Ravindranath Tagore, a visionary and a living legend. He is famous for his versatility and excellence in promoting various agricultural and industrial organizations and is known for his love and affection-uplifting the economically backward classes. Affiliated to JNTUK, Kakinada and approved by AICTE, it aims at providing a sound technical knowledge and broad vision to the technocrats of future as they are prepared for a successful tomorrow. Founded in the year 2009, the institution intends to fabricate proficient engineers to face the dynamic changes of the present century.

The institute is located in a serene atmosphere with magnanimous buildings, state of the art laboratories and class rooms to meet the latest trends of teaching requirements in the area of technical teaching and learning. Well Qualified, experienced and dedicated staff who remain update with the latest developments in their fields is an additional asset to the college.

This world class institute with global standards offers courses at the Undergraduate level in five areas of engineering, at the Post Graduate level in two areas of engineering and at Diploma level in two areas of engineering.

Administration



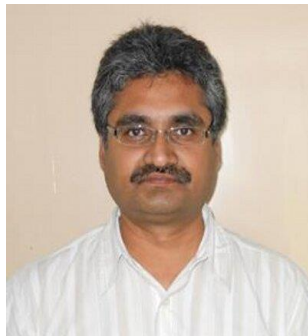
In recent years, a good deal of anxious attention has been paid, all over the world to the utter significance and direct influence of science and technology on our modern life style. Twentieth century is indeed identified as the age of science and Technology. Moreover, the progress of any country in the contemporary world depends entirely or solely upon the improvement made by it in the field of technology. In this context, engineering education plays a meaningful and substantial character and its role can not be excluded. We at 'DhaneKula' strive to provide you the best infrastructure and faculty with the sole aim of ushering excellence in engineering education.

I firmly believe that any technology is successful only when it is diffused through society-uplifting the world economy raising the percapita income of its people. Thus bringing the world class technology home is the ultimate aim of this institution fostering over all development of the students-moulding them into proficient, qualified and socially responsible engineering personnel.



Twenty first century is indeed identified as the age of science and technology and the progress of the country depends entirely or solely upon the improvement made by it in the field of technology. In this context, I strongly hope that this institution with its quality conscious definitely plays a meaningful role in making the students ready for the latest Industrial requirements.

Dhaneekula Bhavani Prasad Secretary, DIET



Dhaneekula Institute of Engineering & Technology, the world class campus offers quality of education for its students to enhance their employability skills and Innovation among the students by inspiring fresh perceptiveness, creative thinking and firm conviction to achieve true success. With an aim to build future for the youth, the college aims to nurture budding talents in the field of engineering and technology as per industry needs. DIET believes in giving a complete education by concentrating on all the aspects of professional building and we have been continuously in the thought process of improving the quality of teaching by implementing various activities like seminars by eminent personalities ,language development, training in soft skills, communication skills, insisting on student discipline, and enthusing the students by encouraging them to participate in extra curricular activities like sports NSS,NCC apart from their academics. Dhaneekula Institute of Engineering & Technology, this institute has been in the process of continuously training the entire faculty to maintain high standards of classroom delivery. Faculty Efforts are also in place for improving the student skills by offering some skill oriented courses for the students. We at DIET believe that honesty, hard work, and discipline together form the ladder for success and try to inculcate these habits in our students.

Dr. Ravi Kadiyala Principal, DIET

Department Vision

To empower students of Computer Science and engineering Department to be technologically adept innovative global citizens possessing human values

Department Mission

To Encourage students to become self-motivated and problem solving individuals To prepare students for professional career with academic excellence and leadership skills. To Empower the rural youth with computer education. To Create Centre's of excellence in Computer Science andEngineering

CONTENTS

STUDENT ACHEVIEMENTS

RANKERS

INDUSTRIAL VISITS

DEPARTMENT ACTICITES

PONGAL CELEBS

REPUBLIC DAY HONOUR

STUDENT ARTICLES

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 Endeavour's to be an important resource centre for the development of computing systems and applications.

The Computer Science & Engineering (CSE) department is established in 2009, offers Undergraduate program (B. Tech.) in Computer Science and Engineering with an initial intake of 60 seats (during Academic year 2009-10) and an additional intake of 60 (120 seats during the Academic year 2010-11). This department has truly become the centre for learning with its excellent infrastructure and other facilities. The college is also having the M.Tech CSE program, from academic year 2012.

The department is having well qualified and experienced faculty members. The faculty is a perfect blend of different specializations in Computer Science and Engineering to impart their expertise in handling diversified courses of the Undergraduate programs.

EDITORIAL BOARD

Faculty Coordinator & Editor :

Ms. P.Sunitha, Asst. Prof.,

Chief Editors :

B.Hitesh, IV year CSE

K.Bharath Kumar, IV year CSE

Student Coordinators :

K.Varsha, III year CSE

P.Sri Ranga, III year CSE

V.Usha, III CSE

K.Medha, I year CSE

J.Hemanth, I year CSE



Students Achievements

3rd year students in Stanford University



**Kamineni Eswar Sessa Sai(158T1A0527), Gopi Venkata Krishna Jonnala gadda(158T1A0530),
T Hareesh Kumar (158T1A0533), K Meher Mandeep Mahesh Sai(158T1A0555)**

These 4 innovators went all the way to Stanford University for The University Innovation Fellows program is run by Stanford University's Hasso Plattner Institute of Design (d.school). This global program trains student leaders to create new opportunities for their peers to engage with innovation, entrepreneurship, design thinking and creativity

- ❖ Our student from 2nd year Participated in "Engineers ka Mahasangram" in Usha Rama College Of Engineering fest and won 15000/- prize money.



ACADAMIC ACHIVEMENTS

Medals

Our student of IV year got medals in academic Performance



U.Sri Devi
(GOLD MEDAL)

P.Kala HARsha
(SILVER MEDAL)

Placements

- ❖ **Infosys** the software giant selects 5 candidates from the final year of CSE, □ 2017-18 as Software Engineers as per the communiqué received. The Management, Principal, Secretary, Faculty & Staff congratulated the successful candidates on their superlative achievement.



P.Kala Harsha B.BhgyaLakshmi V.N.S. Akhila V. Roopa K.Phani Sree DBrahmeswaraRao K. Vinay

RANKERS(4th years)



U.Sri Devi
85%

P.Sai Kiran
84%

P.Hari Priya
83%

D.Saranya
81.5%

3rd years



S. Lavanya
91.7%



K. Nandini
90.3%



V. Usha
89.1%



Ch. Geetha Madhuri
86.3%

List of Students Awarded in Co curricular/ Technical events A.Y:2017-18

S.No	Date	Name of the event	Venue	Name of the student	Awards
1.	5/1/18	ENGG KA MAHA SANGRAM	UshaRama	A. JAHNAVI	III
2.	24/2/18	Coding Contest in C	V.K.R,V.N.B & A.G..K	M.Eswar Krishna	I
3.	24/2/18	Crypt your mind	V.K.R,V.N.B & A.G..K	K.chaitanya sai	II

List of Students Awarded in Paper/poster Presentation AY:2017-18

S.No	Date	Name of the event	Venue	Name of the student	Awards
1	19/09/2017	Paper Presentation	ALIET	B.Kanaka Sri Brahmani	I
2	19/09/2017	Poster Presentation	ALIET	K.Divya Sri	I
3	19/09/2017	Poster Presentation	ALIET	K.Lakshmi Priya	I

List of Students Published Papers in various National & International Journals

S.No	Author Name	Paper Title
1.	Puramsetti Sai Kiran	NETSPAM:An Efficient Approach To Prevent Spam Messages Using Support Vector Machine
	Kollipara Prudhvi Chowdary	
	Thuthika Tirumala Venkata Rayudu	
	Kongaleti Vinay Kumar	
2.	Sanjana Bellamkonda	Tainted Seed Test Using Digital Image Processing
	Dasari Vinod Kumar	
	Shaik Jafar Sadik	
	Swarna Vijay	
3.	Dr. B.Srinivasa Rao ,Uppala Sri Devi	Abnormal Driving Behaviours Detection With Smart Phones
	Avvari Rakesh	
	Kalidindi Muralidhar	
	Surapaneni Rupa Naga Pavani	
	Varre Susmitha	
4.	Mrs. Ch.Padmini,Alapati Tejaswi	Analyzing Different Stock Options And Support In Decision Making For First Time Investors
	Chaparala Nitheesha	
	Bhaviri Venkata Sai Tejaswi	
	Juvva Srivalli	
	Mallipeddi Sravan	
5.	Mrs.V.Swathi,Koratala Phani Sri	Anticipating Advertisement Visibility Using Prospective Representation
	Priya Darshini Muchu	
	Peddi Ramya Sri	
	Donepudi Preetham	
	Vinta Trinadha Reddy	
6.	Mrs. L.N.B.Jyotsna,Veeramachaneni Roopa	An Overlap Arcjitecture For Throughput Optimal Multipath Routing
	Kompella Sri Niyati	
	Anne Venkata Sai	
	Dukke Surya Sai	
7.	Mr. P.Jagadeeswara Rao,Kantamaneni Sai Ravali	An HDFS And Elastic Search Index Approach For Implementing Real Time Or Near Real Time Persisting Daily Healthcare Data
	Teja Sri Kalluri	
	Vadugu Yamini	
	Lanka Vamsi Krishna Vardhan	
8.	Mrs. S.Praneetha,Tipirneni Tejaswi	A Novel Technique For Weed Detection Using Textural Similarities
	Tummala Pujitha	
	Gudikandula Sai Ramya	
	Mathe Soumya	
9.	Mrs. G.Pravallika ,Gollapudi Sai Tarun	1.Enhanced Image Content Security Using CBCD-1 2.Enhanced Image Content Security Using CBCD-2
	Cheedepudi Sai Ramya	
	Valluri Prasanthi	
	Shaik Abdul Rehman	
10.	Mr.P.V.Hari Prasad,Kolavennu Sri Naga Sai	Secure Routing Packet Transmission With

	Kodali Raviteja	
	Mokkapati Sai Balaram Chowdary	
	Boyapati Rachana Choudary	
11.	Mrs. M.Syamala,Kudaravalli Yoga Siri Chandana	Analyzing Feedback Based On Topics And Sentiments
	Vunnam Ranadheer	
	Nalluri Ramya Sri	
	Mokkapati Sowmithri Devi	
12.	Mrs. K.Sandhya Rani,Mekapati Sai Manoj	1. A Heart Disease Prediction Model Using Logistic Regression 2. A Heart Disease Prediction Model Using Logistic Regression by cleveland Database
	Movva Sai Chaitanya	
	Gutta Suguna Mani	
	Gattineni Sai Kiran	
13.	Mrs. M.Ragini Kothapalli Sowmya	Enhanced Lung Cancer Detection Using Opencv
	Tenneti Sowmya	
	Sri Satya Harsha Karuturi	
	Shaik Farheen Naaz	
14.	Mr. N.Ashok,Jonnala Sushma	1.Promish:Nearest Keyword Query Search In Multi Dimensional Datasets 2.Projection And Multiscale Hashing With Nearest Keyword Query Search In Multidimensional Datasets
	Pandala Sushmitha	
	Shareef Yeman Hussain	
	Thota Siva Priyanka	
15.	Dr. B.Srinivasa Rao	Pay-Cloak:Biometric
	Choragudi Sphoorthi	
	Kesana Tejasree	
	Golla Sai Snigdha	
	Vinnakota Sai Raja Harika	
16.	Sunitha Pachala ,Pagadala Kalaharsha	1.A security on Multi Keyword Search Over Outsourced Cloud Data Using N-Gram 2.Encryption:Multikeyword search over outsourced cloud data using N-Gram
	Kodali Meghana	
	Dandu Karishma	
	Kavilikatta Bharath Kumar	
	Akula Divya Sri	
17.	Dr.A.Srinivasa Rao,Bogadula Bhagya Lakshmi	Collabrative Filtering with Preventing Fake Ratings
	Abdul Sirajunnisa Begum	
	Mohammed Ashrafunnisa	
	Eluri Harika	
	Chigurupati Gangadhar	
18.	N.Srilakshmi,Nekkalapudi Divya	1. A Novel Approach For Wireless Body Area Network Challenges and energy Management 2. Wireless body Area Network(WBAN) for Health Monitoring System
	Kakumanu Chinna Keerthana	
	Kusumarajula Mallika	
	Sidda Bhavana Reddy	
	Divya	
19.	K.Sandeep,Korrapati Monisha	Promoting Device To Device Communication In Cellular Networks By Hashing Techniques
	Gunti Navya	
	Dammalapati Harika	
	Tipirneni Aasritha	
20.	A Satish Kumar Ponnakanti Hari Priva	An Efficient Reconstructing Routing Path

	Vasireddy Navya	In Dynamic And Large Scale Networks Using Extensive Hashing
	Velagapudi Naga Anshitha	
	Mohammad Abdul Shabeena Sulthana Begum	
21.	Chittem Nagamani	Cumulating Test Paper Score Based on digital Image Processing using Python
	Chennupati Bhavya	
	Goriparthi Hema Sai Akhilaja	
	Mikkilineni Dhruthi	
22.	M.Ravikanth,Donepudi Brahmeswara Rao	1.Student Library Attendance System Using Face Recognition 2.Library Attendance for students with Face Recognition
	Attota Dinesh Chowdary	
	Kona Bala Krishna	
	Bandreddy Hitesh	
23.	M.Himajyothi,Dittakavi Hemasri Saranya	1.A Novel Approach For using Data Reduction Techniques and Improve Effective Bug Triage 2.Bug Dimension:A Survey On Effective Bug Triage with Data Reduction Techniques
	Annapareddy Aarija Reddy	
	Madala Anil Swamy	
	Guthikonda Nikhitha	
24.	U.Sirisha,Nalajala Naga Navya	1.Fast PhraseSearch in encrypted Cloud Storage Using Nth gram technique 2.An Efficient Fast Phrase Search With Nth-Gram For Encrypted Cloud Storage
	Bandi Mounika	
	Reddy Kalyan Kumar	
	Billa Mani Krishna	
25.	Y.Ashok,Naragoni Durga Pavani	A Novel Technique For Semantic Search Method For Large Scale Storage Systems In Cloud Using ABE
	Dasari Alekhya	
	Kurapati Jyosthna Rani	
	Nandam Akhil Sai	
26.	Mrs.G.Venkata Ramana,Bommadevara Chandra Prakash	1.Using Tag Based Image Search By Social Re-Ranking 2.Image Search By Social RE-Ranking Using Tag Based
	Kanamarlapudi Naga Pujith	
	Ponugumati Akhila	
	Gaddam Jaswanth	
27.	R.Phani Kishore,Korrapati Amulya	Automation of Invigilations in College Examination Portal(Exam-click)
	Cherukuri Hampli	
	Velagapudi Lakshmi Teja Sri	
	Bavineni Indukrishna	
28.	V.V.R.Manoj,Vuyyuru Aditya Rama Narayana	Outlier Detection Using Reverse Neares Neighbor For Unsupervised Data
	Anne Bhargavi	
	Atmakuri Lakshmi Prasanna	
	Mohammad Akhila Banu	
29.	P.Hariprasad,Gottipati Navya Sree	1.Security Enhancement on Data Outsourcing on Comprehensive Auditing In Cloud 2.A Novel Approach Data Outsourcing on Comprehensive auditing in Cloud
	Pedapudi Anuhya	
	Karimikonda Lavanya	
	Pamarthi Durga Naga Sai Prudhvinath	
30.	B.Swathi akkala Madan Gopal	1.Security Enhancement On Cloud Using Advanced Identity Based Encryption 2.Advanced Identity Encryption (AIBE) With Security Enhancement in cloud.
	Peddireddy Durga Vinod	
	Tabeti Hepsi	
	Kammula Eswari Sravya	

STUDENT ACTIVITIES

Industrial Visits

PI DATA CENTRE VISIT IN AMARAVATHI



It's the first data centre that has been built in the capital city Amaravathi. The Opportunity to visit this fabulous data centre has been given to our college and our final year students took the opportunity to learn new things about how they maintain the servers and maintain the data flow. This has brought a lot of knowledge not only to the staff but also a real time experience of the maintenance.

KESARAPALLI IT PARK (MEDHA IT)



One of the first IT Industrial park that has been created in Vijayawada. Recently 7 companies have started their branches in here and they helped students to get a grip on how they are working and linking up with other companies in order to help students get internships and jobs after completion of graduation. Third year students have gained a lot of knowledge from companies perspectives.

DEPARTMENT ACTIVITIES

AWS Technical Essentials (2 day FDP)



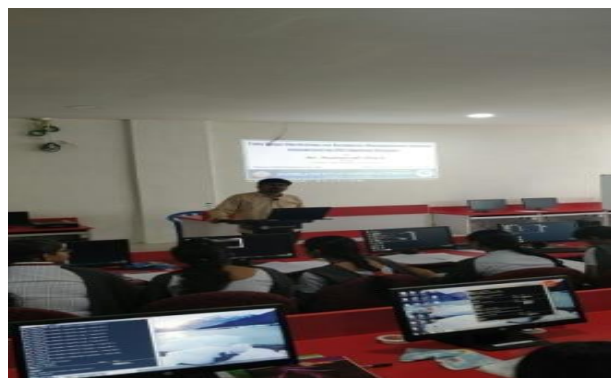
Two day national workshop for the faculty development program on “Amazon Web Services Technical Essentials” giving the staff a brief knowledge on cloud computing. Trainer Smith has done a great job in delivering the right content to the staff and clarifying their queries.

Seminar on AI



AI is the most upcoming and attention gathering topic which is ruling the market now a days so in order to introduce AI to present engineers about what they might be dealing with in future Mr.D.Srikanth is giving a seminar to the students about the AI.

DATABASE MANAGEMENT SYSTEM(2 DAY WORKSHOP)



A 2 day workshop on Database management system for the students so that they can learn the most emerging and advanced technologies to make them aware of the outside world and real world working problems.

IFERP MEMBER SHIP INAUGURAL



Institute For Engineering Research and Publication (IFERP) is India's one of the largest Non-profitable R&D Association operating under Technoarete Research and Development professional association meant for research development and promotion in the field of engineering and technology. IFERP is a paramount body which has brought technical revolution and sustainable development of science and technology. And we have our students get the membership of IFERP.

OS SEMINAR



A seminar on OS by Dr.Raja Bhuksa garu has done a pretty good job in delivering the content about the OS for the second year students in the presence of CSE department HOD Dr. B.Srinivasa Rao garu.

GUEST LECTURE ON FLAT



The Dept. of CSE organized a Guest Lecture on Formal Languages and Automata Theory "on ' 10th Feb 2018 by Dr. T. RAMESH GARU NITW

GUEST LECTURE ON COMPUTER NETWORKS



The Dept. of CSE organized a Guest Lecture on Computer Networks by on 21th Feb 2018 by Dr. Ranjan Routh Garu NITW

Aptis by British Council



Communication plays an important role in every engineers carrier. So we care about our future engineers and with the help of British council we make it possible that every student is ready to attack on the society.

FACULTY DEVELOPMENT PROGRAMS

Real time learning @ FDP on “IoT & Analytics”

The Dept. of CSE conducted a 6-day National -level FDP on “IoT & Analytics” in association with NIT, Warangal. Program was jointly coordinated by Dr.B.SrinivasRao, HOD, CSE. A number of faculty from several colleges including our Faculty participated.



Not only students get better even faculty get better at every step by gaining knowledge in new languages and subjects to improve student knowledge by sharing their subject.

PONGAL CELEBRATIONS



As a part of the Pongal festival celebrations students participated in a huge number showcasing their talent of rangoli. As it is a festival of colors students made a colourful rangoli representing the festival bringing the festive mood all over the college.

REPUBLIC DAY HONOUR



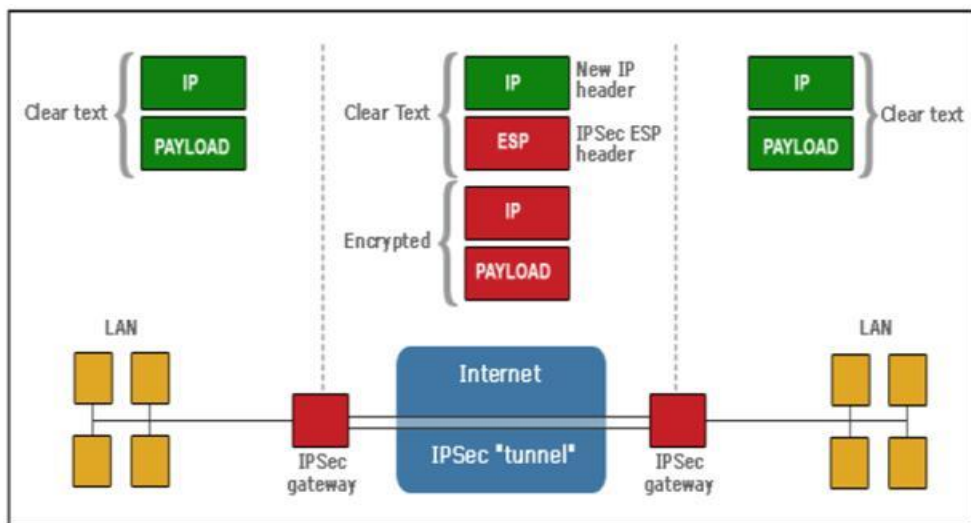
In the presence of our chairman DhaneKula Tagore garu and our principal Dr.K.Ravi garu we celebrated our 69th Republic Day in a grand manner. Principal Dr.K.Ravi garu hoisted the flag on behalf of our college saluting to the Indian flag for maintaining the courage and improving our national spirit.

STUDENT ARTICLES

NETWORK SECURITY: HISTORY, IMPORTANCE, AND FUTURE

By- V.Usha III CSE

Network security has become more important to personal computer users, organizations, and the military. With the advent of the internet, security became a major concern and the history of security allows a better understanding of the emergence of security technology. The internet structure itself allowed for many security threats to occur. The architecture of the internet, when modified can reduce the possible attacks that can be sent across the network. Knowing the attack methods, allows for the appropriate security to emerge. Many businesses secure themselves from the internet by means of firewalls and encryption mechanisms. The businesses create an “intranet” to remain connected to the internet but secured from possible threats.



The entire field of network security is vast and in an evolutionary stage. The range of study encompasses a brief history dating back to internet's beginnings and the current development in network security. In order to understand the research being performed today, background knowledge of the internet, its vulnerabilities, attack methods through the internet, and security technology is important and therefore they are reviewed.

The world is becoming more interconnected with the advent of the Internet and new networking technology. There is a large amount of personal, commercial, military, and government information on networking infrastructures worldwide. Network security is becoming of great importance because of intellectual property that can be easily acquired through the internet.

There are currently two fundamentally different networks, data networks and synchronous network comprised of switches. The internet is considered a data network. Since the current data network consists of computer-based routers, information can be obtained by special programs, such as "Trojan horses," planted in the routers. The synchronous network that consists of switches does not buffer data and therefore are not threatened by attackers. That is why security is emphasized in data networks, such as the internet, and other networks that link to the internet.

The vast topic of network security is analyzed by researching the following:

1. History of security in networks
2. Internet architecture and vulnerable security aspects of the Internet
3. Types of internet attacks and security methods
4. Security for networks with internet access
5. Current development in network security hardware and software

Based on this research, the future of network security is forecasted. New trends that are emerging will also be considered to understand where network security is heading. System and network technology is a key technology for a wide variety of applications. Security is crucial to networks and applications. Although, network security is a critical requirement in emerging networks, there is a significant lack of security methods that can be easily.

There exists a "communication gap" between the developers of security technology and developers of

networks. Network design is a well-developed process that is based on the Open Systems Interface (OSI) model.

The OSI model has several advantages when designing networks. It offers modularity, flexibility, ease-of-use, and standardization of protocols. The protocols of different layers can be easily combined to create stacks which allow modular development. The implementation of individual layers can be changed later without making other adjustments, allowing flexibility in development. In contrast to network design, secure network design is not a well developed process. There isn't a methodology to manage the complexity of security requirements.

Secure network design does not contain the same advantages as network design. When considering network security, it must be emphasized that the whole network is secure. Network security does not only concern the security in the computers at each end of the communication chain. When transmitting data the communication channel should not be vulnerable to attack. A possible hacker could target the communication channel, obtain the data, decrypt it and re-insert a false message. Securing the network is just as important as securing the computers and encrypting the message.

When developing a secure network, the following need to be considered

1. Access – authorized users are provided the means to communicate to and from a particular network
 2. Confidentiality – Information in the network remains private
 3. Authentication – Ensure the users of the network are who they say they are
 4. Integrity – Ensure the message has not been modified in transit
 5. Non-repudiation – Ensure the user does not refute that he used the network
- An effective network security plan is developed with the understanding of security issues, potential attackers, needed level of security, and factors that make a network vulnerable to attack. The steps involved in understanding the composition of a secure network, internet or otherwise, is followed throughout this research endeavor. To lessen the vulnerability of the computer to the network there are many products available. These tools are encryption, authentication mechanisms, intrusion-detection, security management and firewalls. Businesses throughout the world are using a combination of some of these tools.

“Intranets” are both connected to the internet and reasonably protected from it. The internet architecture itself leads to vulnerabilities in the network. Understanding the security issues of the internet greatly assists in developing new security technologies and approaches for networks with internet access and internet security itself.

The types of attacks through the internet need to also be studied to be able to detect and guard against them. Intrusion detection systems are established based on the types of attacks most commonly used. Network intrusions consist of packets that are introduced to cause problems for the following reasons:

- To consume resources uselessly
- To interfere with any system resource's intended function
- To gain system knowledge that can be exploited in later attacks

The last reason for a network intrusion is most commonly guarded against and considered by most as the only intrusion motive. The other reasons mentioned need to be thwarted as well.

Cloud Computing

By— K.Monisha

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.

Artificial intelligence

By Hitesh.Bandreddy. IV CSE-A

Artificial intelligence can generate hilarious song titles and paint colors, but it's also powering some of the most compelling new technology of our time. Machine learning and neural networks are playing larger roles in almost every device and system we use. It's built into your smartphone, your smart home, and maybe even your kitchen stove. As machines get smarter, the implications get more interesting. Will the robots one day take over the world like Elon Musk suggests? If they do, we'll be there to cover it.

Cyber-insurance survey

By G.S.V.Akhil(3rd CSE)

Cyber insurance is a rapidly developing area which draws more and more attention of practitioners and researchers. Insurance, an alternative way to deal with residual risks, was only recently applied to the cyber world. The immature cyber insurance market faces a number of unique challenges on the way of its development.

In this paper we summarise the basic knowledge about cyber insurance available so far from both market and scientific perspectives. We provide a common background explaining basic terms and formalisation of the area. We discuss the issues which make this type of insurance unique and show how different technologies are affected by these issues. We compare the available scientific approaches to analysis of cyber insurance market and summarize their findings with a common view. Finally, we propose directions for further advances in the research on cyber insurance.

Grid Computing By-Kodali.Meghana



Grid computing is a processor architecture that combines computer resources from various domains to reach a main objective. In grid computing, the computers on the network can work on a task together, thus functioning as a supercomputer.

Typically, a grid works on various tasks within a network, but it is also capable of working on specialized applications. It is designed to solve problems that are too big for a supercomputer while maintaining the flexibility to process numerous smaller problems. Computing grids deliver a multiuser infrastructure that accommodates the discontinuous demands of large information processing.

A grid is connected by parallel nodes that form a computer cluster, which runs on an operating system, Linux or free software. The cluster can vary in size from a small work station to several networks. The technology is applied to a wide range of applications, such as mathematical, scientific or educational tasks through several computing resources. It is often used in structural analysis, Web services such as ATM banking, back-office infrastructures, and scientific or marketing research.

The idea of grid computing was first established in the early 1990s by Carl Kesselman, Ian Foster and Steve Tuecke. They developed the Globus Toolkit standard, which included grids for data storage management, data processing and intensive computation management.

Grid computing is made up of applications used for computational computer problems that are connected in a parallel networking environment. It connects each PC and combines information to form one application that is computation-intensive. Grids have a variety of resources based on diverse software and hardware structures, computer languages, and frameworks, either in a network or by using open standards with specific guidelines to achieve a common goal.

Grid operations are generally classified into two categories:

- Data Grid: A system that handles large distributed data sets used for data management and controlled user sharing. It creates virtual environments that support dispersed and organized research. The Southern California Earthquake Center is an example of a data grid; it uses a middle software system that creates a digital library, a dispersed file system and continuing archive.
- CPU Scavenging Grids: A cycle-scavenging system that moves projects from one PC to another as needed. A familiar CPU scavenging grid is the search for extraterrestrial intelligence computation, which includes more than three million computers.

Grid computing is standardized by the Global Grid Forum and applied by the Globus Alliance using the Globus Toolkit, the de facto standard for grid middleware that includes various application components.

Grid architecture applies Global Grid Forum-defined protocol that includes the following:

- Grid security infrastructure
- Monitoring and discovery service
- Grid resource allocation and management protocol
- Global access to secondary storage and GridFTP

Computer Cluster By-V.Navya



A **computer cluster** is a set of loosely or tightly connected computers that work together so that, in many respects, they can be viewed as a single system. Unlike grid computers, computer clusters have each node set to perform the same task, controlled and scheduled by software.

The components of a cluster are usually connected to each other through fast local area networks, with each node (computer used as a server) running its own instance of an operating system. In most circumstances, all of the nodes use the same hardware and the same operating system, although in some setups (e.g. using Open Source Cluster Application Resources (OSCAR)), different operating systems can be used on each computer, or different hardware.

Clusters are usually deployed to improve performance and availability over that of a single computer, while typically being much more cost-effective than single computers of comparable speed or availability.

Computer clusters emerged as a result of convergence of a number of computing trends including the availability of low-cost microprocessors, high-speed networks, and software for high-performance distributed computing. They have a wide range of applicability and deployment, ranging from small business clusters with a handful of nodes to some of the fastest supercomputers in the world such as IBM's Sequoia.

Clusters are primarily designed with performance in mind, but installations are based on many other factors. Fault tolerance allows for scalability, and in high performance situations, low frequency of maintenance routines, resource consolidation and centralized management. Advantages include enabling data recovery in the event of a disaster and providing parallel data processing and high processing capacity.

In terms of scalability, clusters provide this in their ability to add nodes horizontally. This means that more computers may be added to the cluster, to improve its performance, redundancy and fault tolerance. This can be an inexpensive solution for a higher performing cluster compared to scaling up a single node in the cluster. This property of computer clusters can allow for larger computational loads to be executed by a larger number of lower performing computers.

One of the issues in designing a cluster is how tightly coupled the individual nodes may be. For instance, a single computer job may require frequent communication among nodes: this implies that the cluster shares a dedicated network, is densely located, and probably has homogeneous nodes. The other extreme is where a computer job uses one or few nodes, and needs little or no inter-node communication, approaching grid computing.

As the computer clusters were appearing during the 1980s, so were supercomputers. One of the elements that distinguished the three classes at that time was that the early supercomputers relied on shared memory. To date clusters do not typically use physically shared memory, while many supercomputer architectures have also abandoned it.

Jokes

AFTER ENGLISH EXAM

How was the paper?

It was easy but question 5 confused me What was the question?

Question 5 wanted the past tense of "think" I thought & thought & thought

And end up with writing "thinked". --- *Vemula Prathyusha*
158T1A0570 CSE-B

Maths Teacher: What is a line?

Raju: A line is a dot that's going for a walk. **Maths Teacher:** Then what are parallel lines?

Raju: A dot going for a walk with his Girlfriend.

Teacher: How can you make number seven to an even number

Student: Just take the -s out from it! Sir.--- *Sakhamuri Phalguni*

158T1A0566 CSE-B

LIMERICKS

This is where

*I began to care
Where I was befriended;*

This is where

*My soul was bared
Where all my rules were bended;*

This is where

A moment was shared Was stolen and expended;

Now this is where,

*This is where,
This is where we have ended-*

B.Bhgya Lakshmi IV CSE

Hope

"Hope" is the thing with feather

*That perches in the soul -
And sings the tune without the words -
And never stops - at all-*

*And sweetest - in the Gale - is heard -
And sore must be the storm -
That could abash the little Bird
That kept so many warm -*

*I've heard it in the chilliest land -
And on the strangest Sea -
Yet - never - in Extremity,
It asked a crumb - of me.*

V. ROOPA IV CSE