

NARASARAOPETA ENGINEERING COLLEGE (AUTONOMOUS)



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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FACULTY

Dr. S. N. Tirumala Rao

Professor & Head

Dr. B. Jhansi Vazram

Professor

Dr. M. Venkata Reddy

Associate Porfessor

Y. Suresh

Assist. Professor

STUDENTS

SK. Mobina

III - B.Tech. CSE

K. Mitra

III - B.Tech. CSE

VISION:

To become a centre of excellence in nurturing the quality Computer Science & Engineering professionals embedded with software knowledge, aptitude for research and ethical values to cater to the needs of industry and society.

MISSION:

The department of Computer Science and Engineering is committed to

M1: Mould the students to become Software Professionals, Researchers and Entrepreneurs by providing advanced laboratories.

M2: Impart high quality professional training to get expertize in modern software tools and technologies to cater to the real time requirements of the Industry.

M3: Inculcate team work and lifelong learning among students with a sense of societal and ethical responsibilities.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

The graduates of the programme are able to:

PEO1: Apply the knowledge of Mathematics, Science and Engineering fundamentals to identify and solve Computer Science and Engineering problems.

PEO2: Use various software tools and technologies to solve problems related to academia, industry and society.

PEO3: Work with ethical and moral values in the multi-disciplinary teams and can communicate effectively among team members with continuous learning.

PEO4: Pursue higher studies and develop their career in software industry.

PROGRAM OUTCOMES (POs)

- 1. Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. Problem Analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- 4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5. Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

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- 6. The Engineer and Society: Apply reasoning informed by the Cloud computing is a practical approach to experience direct cost contextual knowledge to assess societal, health, safety, legal and benefits and it has the potential to transform a data centre from a cultural issues and the consequent responsibilities relevant to the capital-intensive set up to a variable priced environment. professional engineering practice.
- professional engineering solutions in societal and environmental puting", "distributed computing", "utility computing", or "autocontexts, and demonstrate the knowledge of, and need for nomic computing" is to broaden horizons across organizational sustainable development.
- 8. Ethics: Apply ethical principles and commit to professional ethics Cloud Providers offer services that can be grouped into three and responsibilities and norms of the engineering practice.
- 9. Individual and Team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 9. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- 10. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- 11. Life-long learning: Recognize the need for, and have the preparation and shared across organizations. and ability to engage in independent and life-long learning in the • Private cloud is cloud computing that is dedicated solely to your broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: Apply mathematical and scientific skills in numerous areas of • Defining cloud computing Computer Science and Engineering to design and develop software- • Exploring public, private, and hybrid cloud environments based systems.

PSO2: Acquaint module knowledge on emerging trends of the modern era in Computer Science and Engineering

PSO3: Promote novel applications that meet the needs of entrepreneur, environmental and social issues.

ARTICLE ON CLOUD COMPUTING

Abstract

Resource sharing in a pure plug and play model that dramatically simplifies infrastructure planning is the promise of "cloud computing". The two key advantages of this model are ease-of-use and costeffectiveness. Though there remain questions on aspects such as security and vendor lock-in, the benefits this model offers are many. This article explores some of the basics of cloud computing with the aim of introducing aspects such as:

Realities and risks of the model

Components in the model

Characteristics and Usage of the model

Cloud computing is a computing paradigm, where a large pool of systems are connected in private or public networks, to provide dynamically scalable infrastructure for application, data and file storage. With the advent of this technology, the cost of computation, application hosting, content storage and delivery is reduced significantly.

The idea of cloud computing is based on a very fundamental principal of "reusability of IT capabilities". The difference that cloud 7. Environment and Sustainability: Understand the impact of the computing brings compared to traditional concepts of "grid comboundaries.

Cloud Computing Models

Infrastructure as a Service (laaS) - providing the infrastructure with elements such as servers, operating systems, networks, virtual machines, and storage.

Platform as a Service (PaaS) - this is a service used in developing, testing, and maintaining applications. It provides additional tools such as a database management system DBMS and Business Intelligence (BI) capabilities.

Software as a Service (SaaS) - this service connects users to the applications through the internet, usually on a subscription basis. Desktop as a Service (DaaS) – it provides virtual desktops hosted by a supplier and accessible from anywhere through the internet.

Understanding Public and Private Clouds

Enterprises can choose to deploy applications on Public, Private or Hybrid clouds. Cloud Integrators can play a vital part in determining the right cloud path for each organization.

- Public cloud is cloud computing that's delivered via the internet
- organization.
- Hybrid cloud is any environment that uses both public and private clouds.

This article looks at cloud computing at the highest level by:

- Sharing use cases and examples





Department of Computer Science & Engineering



Cloud Computing Benefits

Enterprises would need to align their applications, so as to exploit the architecture models that Cloud Computing offers. Some of the typical benefits are listed below:

- 1) Back-up and restore data: Once the data is stored in the cloud, it is easier to get back-up and restore that data using the cloud.
- 2) Improved collaboration: Cloud applications improve collaboration by allowing groups of people to quickly and easily share information in the cloud via shared storage.
- 3) Excellent accessibility: Cloud allows us to quickly and easily access store information anywhere, anytime in the whole world, using an internet connection. An internet cloud infrastructure increases organization productivity and efficiency by ensuring that our data is always accessible.
- 4) Low maintenance cost: Cloud computing reduces both hardware and software maintenance costs for organizations.
- 5) Mobility: Cloud computing allows us to easily access all cloud data via mobile.
- 6) IServices in the pay-per-use model: Cloud computing offers Application Programming Interfaces (APIs) to the users for access services on the cloud and pays the charges as per the usage of service.
- 7) Unlimited storage capacity: Cloud offers us a huge amount of storing capacity for storing our important data such as documents, images, audio, video, etc. in one place.
- 8) Data security: Data security is one of the biggest advantages of cloud computing. Cloud offers many advanced features related to security and ensures that data is securely stored and handled.

Cloud Computing Challenges

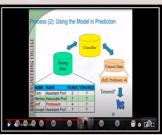
Despite its growing influence, concerns regarding cloud computing still remain. In our opinion, the benefits outweigh the drawbacks and the model is worth exploring. Some common challenges are:

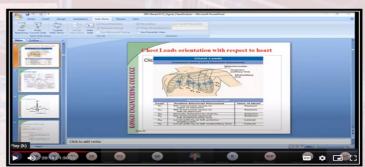
- Security and Privacy
- Managing Cloud spend
- Lack of Resources/Expertise
- Governance/Control
- Compliance
- Managing multiple clouds
- Computing Performance
- Building a private cloud
- Portability
- Service Quality
- Interoperability
- Availability and Reliability

Department of CSE Organized A Short Term Course on "Deep Learning for Computing Vision Medical Applications" (Series – 2) Co-ordinated by Dr. S.V.N. Srinivasu from 30-11-2020 to 05-12-2020 for faculty. Dr M. SRINIVASU, Associate Professor, NIT Warangal, Mr A.Durga Shiva Prasad, Sr Trainer, SAK Informatics, Hyderabad, Dr Rama Murthy G, Professor in CSE, Mahendra university, Hyderabad, Dr Nikhal Marriwala, Associate Professor in ECE, Kurukshetra University.More than 70 colleges participated and 114 faculty attended.



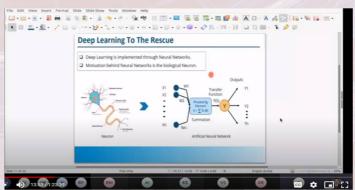






Department of CSE Organized A Short Term Course on "Deep Learning for Computing Vision Medical Applications" (Series – 1) Co-ordinated by Dr. S.V. N. Srinivasu from 16-11-2020 to 21-12-2020 for faculty. The resource persons are Dr.R.B.V Subramanyam NIT WARANGAL, Mr A.Durga Shiva Prasad, Sr Trainer, SAK Informatics, Dr Nikhal Marriwala, Associate Professor in ECE, Kurukshetra University, Dr P.Natesan, Professor and Head, Dept. of CSE, Kongu Engineering College, ErodeKurukshetra. Total More than 75 colleges participated and 135 faculty attended.









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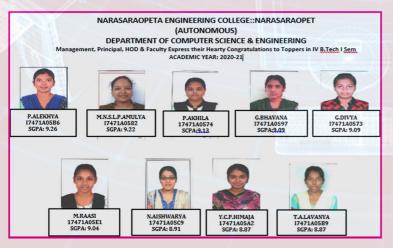
A Short Term Course on "Deep Learning for Computing Vision Medical Applications" (Series-2) Coordinated by Dr.S.V.N Srinivasu on 31st Nov to 5th Dec, 2020 and hosted by Dr M. SRINIVASU, Associate Professor, NIT Warangal, Mr A.Durga Shiva Prasad, Sr Trainer, SAK Informatics, Hyderabad, Dr Rama Murthy G, Professor in CSE, Mahendra university, Hyderabad, Dr Nikhal Marriwala, Associate Professor in ECE, Kurukshetra University

A Short Term Course on "Deep Learning for Computing Vision MedicalApplications" (Series-1) Coordinated by Dr.S.V.N Srinivasu on 16th to 21st Nov,2020 and hosted by Dr.R.B.V Subramanyam NIT WARANGAL, Mr A.Durga Shiva Prasad, Sr Trainer, SAK Informatics, Dr Nikhal Marriwala, Associate Professor in ECE, Kurukshetra University, Dr P.Natesan, Professor and Head, Dept. of CSE, Kongu Engineering College, ErodeKurukshetra.

ACADEMIC TOPPERS







STUDENTS ACHIEVEMENTS

SNO	CERTIFICATION NAME	NO OF STUDENTS WHO DONE CERTIFICATIONS	CERTIFICATE MODEL
1	SOLOLEARN	496	CERTIFICATE STATE CONTINUES STATE CONT
2	NPTEL	37	O NOTEL Out Certains
3	MTA	101	Advicesorit Technology Advicesorie Matterial and Matterial Advicesorie Matterial and Matterial Advicesorie Matt
4	APSSDC	160	The second secon
5	RED HAT LINUX	42	Red Hat Copylification Official Dates Copylification Copylificatio

STUDENT VOICE

It has been a crazy journey with NEC. I found some great friends and Teacher in the duration of 3 years. It is nice that most of our lecturers are very humble and motivating. The students offered the opportunity to speak at the front of the room, later the student who feared public speaking are now speaking infront of the crowd easily. This college help me to push my boundries and achive the ultimate version



Sk Md Arshad 18471A05H2

of myself. Also the Placement cell in this college is pretty strong. With this inspiration i have got placed in wipro. Overall i am not regretting my decision to join this college.

Well, i am happy to share 4 years of college. NEC has a great infrastucture to study, explore and play. It feel very safe for girls. This is also because of the environment maintained across the campus. The College helps you to find your stengths and to work on it. It gives Oppurtunity to work and expose your skills to the outside world. The teachers are extreamly well trained and educated to teach us technical skills.



G Sai Akhil 17471A0524

Whenever there is an issue regarding students our department head always step forward sponteneously to solve the issue. With this best facilities and motivation i have selected for dxc and working with skills i have gained over the past 4 years in the NEC college.