# NARASARAOPETA ENGINEERING COLLEGE:NARASARAOPET(AUTONOMOUS) DEPARTMENT OF MCA NEWS LETTER

## "TECHNOLOGY IS TEACHING US TO BE HUMAN AGAIN"

## VISION

To prepare MCA Department as a generator of world class Software Professionals / Entrepreneurs.

#### MISSION

- \* Import the knowledge of modern s/w tools to meet the challenges in current day competition.
- \* Imparting employability skills in students.
- \* Encourage research activities among students and staff.

## NEW TRENDS IN TECHNOLOGY

#### **BIG DATA**

The world generates over 59 trillion GB of data per day, including 306.4 billion emails! Where is all this data stored? How is all this data recorded so quickly? That's what Big Data tries to solve - how to capture and process tons of data to make it easily and quickly accessible. Big data intersects a lot with cloud computing because they both relate to behind the scenes software infrastructure.

#### ROBOTICS

Although robots aren't walking and talking with normal people like they do in science fiction movies, robotics still play an important role in our everyday lives. Hospitals use robotic arms to assist surgeons in surgery. Food and packages are starting to be delivered by drones. Factories use robots to assemble the products we use every day like phones and cars. In fact, 2.7 million robots work in factories across the world. Future advancements to robotics is to integrate computer vision and natural language processing to enable them to interact with the world more naturally.

# DISTRIBUTED CLOUD

Distributed cloud is the distribution of public cloud services to different physical locations, while the operation, governance, updates and evolution of the services are the responsibility of the originating public cloud provider.

#### BLOCKCHAIN

A blockchain is a distributed database that is shared among the nodes of a computer network. As a database, a blockchain stores information electronically in digital format. Blockchains are best known for their crucial role in cryptocurrency systems, such as Bitcoin, for maintaining a secure and decentralized record of transactions. The innovation with a blockchain is that it guarantees the fidelity and security of a record of data and generates trust without the need for a trusted third party.

## ARTIFICIAL INTELLIGENCE

Artificial intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think like humans and mimic their actions. The term may also be applied to any machine that exhibits traits associated with a human mind such as learning and problem-solving.

#### VIRTUAL REALITY

Virtual Reality (VR) is a computer-generated environment with scenes and objects that appear to be real, making the user feel they are immersed in their surroundings. This environment is perceived through a device known as a Virtual Reality headset or helmet.

## SERVERLESS COMPUTING

Serverless computing is an execution model for the cloud in which a cloud provider dynamically allocates—and then charges the user for—only the compute resources and storage needed to execute a particular piece of code. Naturally, there are still servers involved, but their provisioning and maintenance are entirely taken care of by the provider.

#### **5G NETWORKS**

5G is the 5th generation mobile network. It is a new global wireless standard after 1G, 2G, 3G, and 4G networks. 5G enables a new kind of network that is designed to connect virtually everyone and everything together including machines, objects, and devices. 5G wireless technology is meant to deliver higher multi-Gbps peak data speeds, ultralow latency, more reliability, massive network capacity, increased availability, and a more uniform user experience to more users.

# **Computer Vision**

These fields give computers the ability to see and listen. Computer vision is the technology behind enabling computers to see the world. It is the crucial technology behind self-driving cars, facial recognition, and Snap chat / Zoom filters. The technology has become so advanced that it is even more accurate than humans in identifying images!

# Natural Language Processing

Natural Language Processing (NLP) is how computers are able to recognize what humans say. NLP is found in voice enabled smart devices like Apple's Siri and Amazon's Alexa. These fields overlap with Artificial Intelligence and Machine Learning because computers use the same AI/ML algorithms to process inputs, whether it is visual or audio.

#### **Bioinformatics / Medical Technology**

Just like other aspects of our lives, computers are revolutionizing medicine. Bioinformatics is the use of computers to study biological data such as DNA. By analysing DNA with AI / ML techniques, computers can assist scientists in uncovering the root causes of diseases developing cures, including this recent potential cure for certain cancers here. Other computer science trends intersect with medicine. For example, using robots for surgery is becoming more widespread.

# CYBERSECURITY

In the past, information was secured from robbers by metal vaults and security guards. Today, digital information is secured from hackers by cyber security. As more of our lives is online, the more important cyber security becomes. There's a successful computer hack every 39 seconds! There are many sub-fields within cyber security. For example, cryptography finds new algorithms to encrypt sensitive information, or make it such that information cannot be read unless the reader knows a password. Another example is network security - ensuring computer networks or cloud networks are only accessible by the correct users and applications.

# NARASARAOPETA ENGINEERING COLLEGE:NARASARAOPET(AUTONOMOUS) DEPARTMENT OF MCA NEWS LETTER

## "TECHNOLOGY IS TEACHING US TO BE HUMAN AGAIN"

## STUDENT FOCUS

I MCA I Semester 60 students are attended a Guest Lecture on "Object Oriented Analysis & Design" by Dr. Y.K. Sundara Krishna, Professor, Department of Computer Science, Krishna University on 04-02-2023.



Fresher's & Farewell function was conducted on 29-03-2023 for I MCA & II MCA Students.



Fresher's & Farewell function in MCA Department

# Toppers from I MCA I Semester (2022 Batch)



## **Toppers from II MCA III Semester (2021 Batch)**



## **ALUMNI VOICE**

Finding the right path to success at the right time is really very important and for that way I had selected NEC. The friendly environment, the systematic approach towards imparting education at NEC made me a competent individual. The faculties are really very kind approachable when any need arises. In NEC, we are trained for our placements and because of that I was placed in one of the reputed companies for my internship.



P. Maheswari 20471F0043 MCA Alumni

## STUDENT VOICE

I am very proud to be a part of this department. The Department of MCA has recorded consistent improvement in its academic, research and placement performance. It offers a range of innovatively designed programs whose curricula are constantly updated to meet the changing requirement of the industry and to meet the needs of major stakeholders.



I. Lavanya 21471F0023