#### **VISION**

To become an identified development center for high quality professionals in the area of Computer Science and Engineering serving the societal needs.

#### MISSION

**DM1:** To train the stakeholders in the area of Computer Science and Engineering.

**DM2:** To organize innovative technical training and leadership activities to groom professionals.

**DM3:** To provide quality resources towards research and development on Artificial Intelligence.

#### PO'S

**PO1:** Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

**PO2:** 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.

**PO3:** 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.

**PO4:** 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.

**PO5:** 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.

**PO6:** The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

**PO7:** Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

**PO8:** Ethics Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

**PO9:** Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

**PO10**: 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.

**PO11:** 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.

**PO12**: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

#### PEO's

**PEO1:** Apply engineering knowledge in the chosen fields with ethics and professional values.

**PEO2:** Continue to learn and solve real life problems inculcate with interdisciplinary teams.

**PEO3:** Face the challenges in industry and pursue higher studies. **PSO's** 

**PSO 1:** Develop computer applications by applying Artificial

**PSO 2:** Demonstrate the skills in the field of Networks, Web-Design, Cloud Computing and Data Analytics.

#### **ABOUT DEPARTMENT**

Intelligence.

The Department of Computer Science and Engineering at DNRCET was established in 2010. The department offers Undergraduate course B.Tech with 180 seats and also offers post graduation of M.Tech in Computer Science & Engineering with 18 seats

The Department has highly qualified and experienced faculty with a minimum qualification of M.Tech. The Department of CSE has sophisticated computing facilities like splendid computer labs with latest and Facilitate and equipped configuration systems. The Department has conducted various seminars and workshops to inculcate latest technologies to the students and to meet the industrial requirements.

Computer engineers work in almost every industry starting from health care and gaming to banking and online shopping. They might find themselves in a variety of environments in academia, research, industry, government, private and business organizations—analyzing problems for solutions, for mutating and testing, using advanced communications, or working in teams for software development.

#### **ADMINISTRATOR MESSAGE**



Sri.G SATYANARAYANA RAJU Hon.Secretary & Correspondant DNR Association

## "Education is the most powerful weapon which you can use to change the world."

Your power to choose the direction of your life allows you to reinvent yourself, to change your future, and to powerfully influence the rest. Leadership and learning are indispensable to each other. The only person who is educated is, the one who know how to learn and change. You are the "Change" to yourself and your future. You are welcome to DNR College Of Enginnering & Technology, one of the most prestigious colleges for enginnering and technology, which is affiliated to JNTUK, Kakinada. The institution provides you the space to ignite your imagination and inspire you to love learning.

#### **PRINCIPAL MESSAGE**



#### Dr.M.Anjan Kumar M.E.,Ph.D.,MIGS,MIS,MISTE,MIRC PRINCIPAL

Technological enlargement in a country chiefly depends on how far the Engineers are going to put their knowledge into practice Strong elementary concepts with innovative mindset is the requirement of the present day Engineers. Our main slogan in educating the budding Engineers is to lay a very strong foundation for the future circumstantial adaptation in the practical field Strengthening the fundamental concepts and exposure to the current development and future trend is our main aim in teaching in the Technological environment as there is a tremendous boom for the practical and research orient education in the future.

#### **HOD MESSAGE**



Dr.Satyanarayana Gaddada M.Tech.,Ph.D., Professor & HoD

The DNR College Of Engineering & Technology is helping students to reshape their future to become a valuable asset for the nation. We are committed to academic excellence in the fields of Computer Science and Engineering, leading to develop students through academia and industry linkages. The students of the computer science and engineering are highly demanded by the recruiters of the top companies to enhance their employability skills through Industry Institute Collaboration.

Computer Science is a relatively young discipline of research. With computers as smart tools to help us think, we have to rely less on guessing. We can support our decisions by data. This is becoming more and more important in our increasingly digital economies. Artificial Intelligence is an area that has gained much attention recently, not only within the research community but also in our daily lives. For example think about self-driving cars, Al-driven medical diagnostics and personal health, face identification, or natural language understanding etc. Another budding area of research is Data Science where we use computational tools to gather data, filter them, separate noise from useful information, and create knowledge, from which we can make better decisions and build smarter, enabling tools for our daily lives and to support our professional endeavours.

### Workshops/Seminars/Training Programs WORKSHOP-1

- A Three days workshop Program on "Machine Learning Algorithms" conducted On 11-08-2022 to 13-08-2022.
- Mr.B Yakub, Associate Technical Lead, Hyderabad is delivered a lecture on Machine Learning Algorithms.
- Final year students and faculty participated in the workshop from the Department of Computer Science & Engineering.
   Mr. B. Nandan Kumar & Mr. K S R Prasad, Assistant Professor in Computer Science and Engineering, DNRCET acts as a Coordinator to the event.



Machine Learning algorithms are the programs that can learn the hidden patterns from the data, predict the output, and improve the performance from experiences on their own. Different algorithms can be used in machine learning for different tasks, such as simple linear regression that can be used for prediction problems like stock market prediction, and the KNN algorithm can be used for classification problems.

Resource person **Mr.B.Yakub** discussed about the supervised ,unsupervised, and reinforcement machine learning algorithms.

#### **Guest Lecture**

- A one day guset lecture on "Routing Algorithms in Computer Networks" conducted On 03-09-2022.
- Mr.K S N Prasad, is delivered a lecture on Routing Algorithms in Computer Networks.
- In this session discussion goes on supervised, unsupervised and reinforcement algorithms in machine learning.



- In order to transfer the packets from source to the destination, the network layer must determine the best route through which packets can be transmitted.
- Whether the network layer provides datagram service or virtual circuit service, the main job of the network layer is to provide the best route. The routing protocol provides this job.
- The routing protocol is a routing algorithm that provides the best path from the source to the destination. The best path is the path that has the "least-cost path" from source to the destination.
- Routing is the process of forwarding the packets from source to the destination but the best route to send the packets is determined by the routing algorithm.

#### **WORKSHOP-2**

- A Three days workshop program on "Realtime Operating Systems" conducted On 26-09-2022 to 28-09-2022.
- Mr.V Gowtham is delivered a lecture on Realtime Operating Systems for the second year students intheir first semester.

**Real-time operating systems (RTOS)** are used in environments where a large number of events, mostly external to the computer system, must be accepted and processed in a short time or within certain deadlines. such applications are industrial control, telephone switching equipment, flight control, and real-time simulations. With an RTOS, the processing time is measured in tenths of seconds. This system is time-bound and has a fixed deadline. The processing in this type of system must occur within the specified constraints.

### **MINDROID**

Departmental News Letter

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## DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

# DNR COLLEGE OF ENGINEERING & TECHNOLOGY

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