VASIREDDY VENKATADRI INSTITUTE OF TECHNOLOGY
Approved by AICTE, Permanently Affiliated to JNTU Kakinada, NAAC Accredited with 'A' Grade, ISO 9001:2008 Certified,
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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
(NBA Accredited and DST-FIST Sponsored Department)

JULY 2023

DEPARTMENT VISION

To produce globally competitive and socially responsible engineering graduates and to bring out quality research and education, generating knowledge in the frontier areas of Electronics and Communication Engineering

DEPARTMENT MISSION

1. To achieve self-sufficiency on all fronts to ensure qualitative Teaching-Learning practices.
2. To provide quality education, student-centred Teaching-Learning processes and state of art infrastructure for professional aspirants hailing from both rural and urban areas.
3. To impart technical education that encourages independent thinking, developing strong domain knowledge, contemporary skills and attitude towards holistic growth of young minds.
4. Responsiveness to both local and global industry needs and creating opportunities through incubation and implementation of innovative programs
5. To serve the community as disciplined responsible citizens in a rapidly changing and expanding global community.
6. Evolving this organization into a centre of academic and research excellence.

IMPACT OF ARTIFICIAL INTELLIGENCE IN TRANSFORMING WORLD:

Artificial Intelligence is the ability of a digital computer-controlled robot to perform tasks commonly associated with intelligent beings. In simple words, Artificial Intelligence is a branch of CSE used to replicate Human Intelligence machines. There is a small history for generating AI. Initially AI was invented in early 1950's by **Alan Turing.** Later in 1980 Algorithms are generated, and in early 2000's a new AI called **Generative AI** was introduced. The various generations of AI are, first wave: **Reasoning**, second wave: **Acquires knowledge**, Third wave: **Regenerative Thinking**. There is different criterion in AI. The first one is **Learning Criteria** which involves **Supervised Learning** and **Unsupervised Learning**. Learning under the guidance of humans is supervised learning. This kind of learning provides the labelled data as the output and unsupervised learning means that learning under the surveillance of machines itself. This kind of learning provides unlabelled data as the output. The second one in the criteria of AI is **Algorithm criteria**. This involves Classification, **Clustering**, which means the system doesn't know what is certain data but based on diagonal edges it some classification. **Regression**, which means prediction of weather stock market. **Reinforcement learning**, it is centred around a digital agent who is put in specific environment to learn. Artificial Intelligence involves two parts **Machine Learning,** which gives the data to machine based on the experiences to the extreme situation, And the other one is **Deep Learning**, in which algorithms are influencing the neuron responses of the human. Data security, social media, Automotives, Astronomy, Finance, Military Technology are the applications of AI in Machine Learning. Image colourisation, Object Realisation, Face Detection, Automated Speech are the applications of AI in Deep Learning. Despite all the excitement, there are still many challenges that need to be addressed before AI can truly reach it's potential. Few challenges of AI are: **Ethical and legal concerns**, As AI systems become more powerful, there are concerns about the impact of these systems on society and law. There is a need for clear regulations governing the use of AI. **Security and Privacy concerns,** As AI systems become more sophisticated, they will become more attractive targets for hackers. There is also the potential for misuse, as AI systems can be used to manipulate people and data. Some other challenges are Lack of emotions, Unemployment, High cost, Lack of explain ability……

QUOTE: "Predicting the Future isn't magic; it is Artificial Intelligence"

-Dave Waters