Innovative Teaching Practice: PPT / Video Link

Faculty Name	B.Indra Devi
Course Name	Artificial Neural Network
Academic Year	2021-22
Class	IV/II SEM
Topic	State - Space Concepts

Objective of the Activity:

The integration of PPT and video-based resources significantly enriched the learning experience.Simplify complex concepts using visually appealing and structured PowerPoint presentations.To enhance learner engagement by integrating multimedia elements like images, diagrams, and animations.To support diverse learning styles (visual, auditory, self-paced) through the combination of static slides and dynamic video content

Pre-Class Preparation:

Students were able to visualize and understand the architecture and implementation State - Space Concepts, improving both theoretical knowledge and hands-on skills.

- **PowerPoint Presentations**: Delivered structured theoretical content with diagrams, flowcharts, and step-by-step model explanations.
- **Video Links**: Curated and shared high-quality tutorial videos to Familiarize State-Space Representation

In-Class Activity:

1. Review the Basics of Neural Networks

- **Key Concepts** to Review:
  - **What is an Artificial Neural Network?**
    - Learn about the basic structure of an ANN (input layer, hidden layers, output layer).
    - Understand the concept of **neurons** and **activation functions**.
  - **Types of Neural Networks** (Feedforward, Recurrent, etc.)
  - **Learning Process**: Backpropagation, gradient descent, and training of ANNs.

2. Watch Introductory Videos or Lectures

- **Video/Reading**: Watch the instructor-recommended **NPTEL video** or **lecture** on **Artificial Neural Networks**.
  - Focus on understanding the **architecture, training mechanisms**, and **applications** of neural networks.
  - Watch the segment specifically related to **state-space representation** of neural networks, if provided.

Time Allotted for Activity:

- Pre-class preparation:**50Minutes**
- In-Class **Activity**:**50 Minutes**

Images / Screenshot of the practice

PPT / Video Link Class Room Activity	Screenshot of the practice
Activity on PPT / Video Link	

Benefits of practice:

- **Improves Active Participation**: Students will be able to engage more meaningfully in discussions and activities during class.
- **Foundational Knowledge**: Pre-class preparation allows students to build a foundation, making complex topics (like state-space representation in neural networks) easier to understand in class.
- **Fosters Self-Learning**: By encouraging self-paced learning through videos and readings, students become more responsible for their learning and comprehension.

Signature of Faculty Member

HOD

Head of the Department
Department of Computer Science and Engineering
Sri Vasavi Institute of Engineering and Technology
NANDAMURU 521 369