



Bharatiya Vidya Bhavans'
Sardar Patel Institute Of Technology
Munshi Nagar, Andheri(W), Mumbai-400058
CSE- Master of Computer Applications Department

Academic Year: 2025-26
Course Code: MC513

Semester: III
Course Name: Deep Learning

Class: SYMCA

1. **Literature-Based Learning:** A comprehensive survey of loss functions and metrics in deep learning research paper is given to students after lecture and asked them to do comparative analysis of loss function as per their understanding

Outcome: Students developed the ability to critically compare different loss functions and metrics and select their appropriate applications based on their understanding.

2. **Flipped Classroom:** I have provided students with short video links to watch as a prerequisite for understanding the upcoming topic in the classroom. These videos provide visual explanations that help students develop a basic conceptual understanding before the topic is discussed in class. After watching the videos, students were asked questions to assess their understanding of the concepts covered.

Outcome: Video-based learning followed by assessment to evaluate students' conceptual

3. **Experiential Learning:** Introduced a hands-on Fashion MNIST autoencoder lab for students to explore and enhance their learning of unsupervised image compression through code

Outcome: Students gained practical experience in implementing autoencoders and developed an understanding of unsupervised image compression through hands-on coding.

▼ Research Paper

Dear Students,

Kindly go through the research paper and write [comparative analysis](#) of all the loss functions mentioned in the paper and upload it on moodle



A comprehensive survey of loss functions and metrics in deep learning



Comparative Analysis

Opened: Saturday, 23 August 2025, 3:00 PM

Due: Thursday, 25 September 2025, 10:00 PM

▼ Implementation of Autoencoder



[Submit here](#)

Opened: Thursday, 16 October 2025, 12:00 PM

Due: Thursday, 16 October 2025, 2:00 PM

▼ Flipped Classroom

Dear Students,

Kindly watch this video before coming for next lecture

we will have discussion in the classroom based on this video content.

