

## Assignment 2

**Note:** Students must work in groups of 2.

Perform image classification using the CIFAR-10 dataset:

<https://www.cs.toronto.edu/~kriz/cifar.html>

Tasks:

- Build a basic MLP (Multi-Layer Perceptron) neural network with 3 layers.
- Build a Convolutional Neural Network (CNN) with 3 convolution layers.
- Perform image classification using both neural networks, including training, validation, and testing.
- Plot learning curves.
- Plot confusion matrix.
- Compare and discuss the results of the two neural networks.
- Use the PyTorch library.

One group member must submit the assignment via their personal GitHub.

The submission should include:

- A report file (PDF format)
- Python code