

## Week 2 Tasks

## Week 2: Convolutional Neural Networks (CNNs)

- Introduction to CNNs: Implement a simple convolutional layer and pooling layer from scratch.
- Building CNNs: Create a CNN using Keras for image classification on the CIFAR-10 dataset.
- Data Augmentation: Apply data augmentation techniques to the training data to improve model generalization.
- Model Optimization: Experiment with different architectures, activation functions, and optimizers.
- Hyperparameter Tuning: Use grid search or random search to find the best hyperparameters for the CNN.





