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Emilie Ferdinand Joud Zakharia		

Assignment Sheet Nr. 5

Test set: Average loss: 0.0000, Accuracy: 1498/1506(99%) Best accuracy (val): 99.46879150066401.
This results differs from the shown result on the Leaderboard : 99.3.

1. architecture: a CNN with 3 Conv2d layers activated with ReLU, 3 pool layers, fully connected layer and sigmoid for the classification.

```
self.model = nn.Sequential(  
    nn.Conv2d(3, 11, 5),  
    nn.ReLU(),  
    nn.MaxPool2d(3),  
    nn.Conv2d(11, 13, 5),  
    nn.ReLU(),  
    nn.MaxPool2d(3),  
    nn.Conv2d(13, 15, 5),  
    nn.ReLU(),  
    nn.MaxPool2d(3),  
    nn.Flatten(),  
    nn.Linear(150, 1),  
)
```

2. optimizer: Same as source code.
3. hyperparameters: lr same as source code.
4. data augmentation: RandomVerticalFlip and RandomHorizontalFlip.

```
transform = transforms.Compose([  
    transforms.ToTensor(),  
    # This normalization is used on the test server  
    transforms.RandomHorizontalFlip(),  
    transforms.RandomVerticalFlip(),  
    transforms.Normalize([0.2404, 0.2967, 0.3563], [0.0547, 0.0527,  
                                                         0.0477])  
)
```

5. normalization: same as source code.