

Practice Problems 9

Machine Learning

1. Download the dataset MM-IMDB from <https://www.kaggle.com/johnarevalo/datasets>. Select 2000 images with *drama* label and 2000 with *horror* label. Be careful to exclude those images with both labels. Perform a 60%-20%-20% stratified split for training, validation and test datasets.
2. Use a fine tuning approach to train a ResNet50 network to discriminate between drama and horror movies.
3. Evaluate the model over the test dataset. Discuss the results.