Lab 7

Statistics, Machine Learning, Deep Learning

1. Write a Python program that computes the value of the Gaussian distribution at a given vector X. Hence, plot the effect of varying mean and variance to the normal distribution.

2. Write a python program to implement linear regression.

3. Write a python program to implement gradient descent.

4. Write a python program to classify different flower images using MLP.

5. Write a python program to classify different flower images using the SVM classifier.

6. Write a python program to classify different flower images using CNN.

7. Write a python program to classify different handwritten character images using the SVM classifier.

8. Write a python program to classify different face images using CNN.

9. Write a python program to identify a person from the walking style (gait recognition) using convolutional recurrent neural network.

10. Write a python program to classify breast cancer from histopathological images using VGG-16 and DenseNet-201 CNN architectures