

## **LIST OF FIGURES**

<b>S.No</b>	<b>Figure No.</b>	<b>Title</b>	<b>Page No.</b>
1.	Fig 1.1	Flower Detection	2
2.	Fig 1.2	Structure of CNN	3
3.	Fig 3.1	Block diagram for Image Classification	13
4.	Fig 3.2	No of images based on type of the flower	14
5.	Fig 3.3	CNN process for flower images	14
6.	Fig 3.4	Image augmentation	15
7.	Fig 3.5	Augmented images with random rotation	15
8.	Fig 3.6	Augmented images with random shift	17
9.	Fig 3.7	Augmented images with random flip	17
10.	Fig 3.8	Augmented images with random brightness	18
11.	Fig 3.9	Augmented images with random zoom	18
12.	Fig 3.10	Structure of artificial neuron	19
13.	Fig 3.11	Layers in CNN	20
14.	Fig 3.12	Filters in Con2D layer	21
15.	Fig 3.13	Padding in CNN	21
16.	Fig 3.14	Strides in CNN	22
17.	Fig 3.15	ReLU operation	23
18.	Fig 3.16	Max pooling layer	23
19.	Fig 3.17	Fully connected layer	24
20.	Fig 5.1	Supervised classification structure	30
21.	Fig 5.2	Framework for building model	30
22.	Fig 5.3	Convolution Neural Network	31
23.	Fig 6.1	Importing libraries and Loading of Dataset	47
24.	Fig 6.2	Resizing the images	47
25.	Fig 6.3	Random images from the dataset	48
26.	Fig 6.4	Summary of the model	49

27.	Fig 6.5	Split the data set	49
28.	Fig 6.6	Fitting the model on train data	50
29.	Fig 6.7	Correctly classified images	51
30.	Fig 6.8	Misclassified images	52
31.	Fig 6.9	Predicting on new Tulip image	53
32.	Fig 6.10	Predicting on new Rose image	53
33.	Fig 6.11	Confusion Matrix	54
34.	Fig 6.12	Accuracy score	54
35.	Fig 7.1	Plot of loss	58
36.	Fig 7.2	Ploy of accuracy	58
37.	Fig 7.3	Conclusion from confusion matrix	59
38.	Fig 7.4	Testing on new images	60