

Model to Find Variety of Fruits

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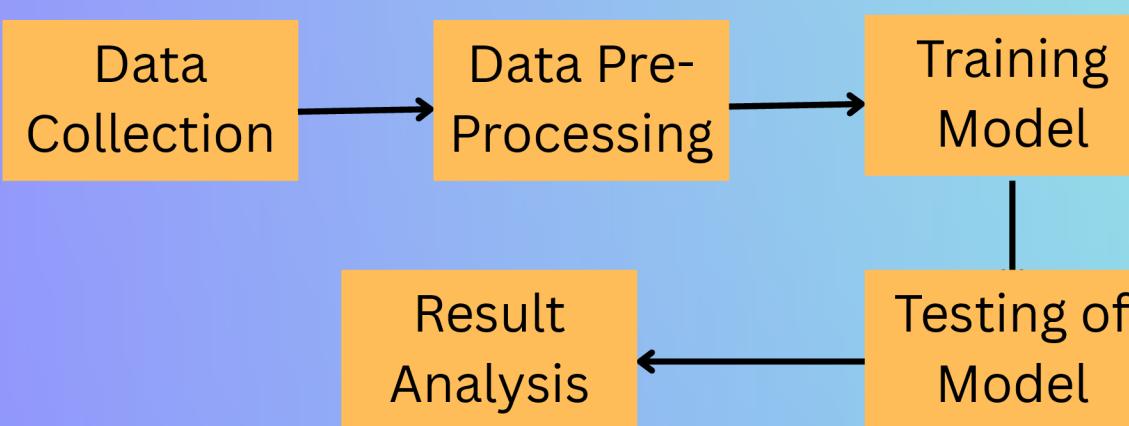
1. Abstract

This project aims to identify fruits—apple, orange, kiwi, and mango—using their color, texture, and shape. By training a model with images of these fruits, the system can quickly and accurately recognize them. Such a tool can help in sorting, quality checks, and making fruit selection faster and easier.

2. Introduction:

Fruits like apples, oranges, kiwis, and mangoes are easy for us to recognize, but not for machines. Using image recognition, we can train a computer to spot these fruits by their color, shape, and texture. This makes sorting and selection faster and easier in places like farms and stores.

3. Methodology



4. Input/Output

| Test | Actual | Predicted | Result |
|------|--------|-----------|--------|
| | Apple | Apple | ✓ |
| | Orange | Orange | ✓ |
| | Kiwi | Kiwi | ✓ |
| | Mango | Mango | ✓ |

Accuracy of Model = 92.5%

5. Steps To use Model

1. Scan the QR Code
2. Upload sample Photos
3. Select Uploaded Photo
4. Get the model Prediction



6. Conclusion

This model shows that machines can learn to recognize fruits just like we do. By teaching it to spot the colors, shapes, and textures of apples, oranges, kiwis, and mangoes, we make sorting and selection quicker and more reliable. It's a small step toward making everyday tasks a little smarter and easier. Accuracy can be improved by fine-tuning on larger or more diverse database.

7. References

1. <https://landing.ai/>
2. <https://www.kaggle.com/datasets/samithsachidanandan/image-classification-cnn-fruits-dataset>