

25 CNN Projects (Beginner to Advanced)

Beginner Level

1. Handwritten Digit Recognition – MNIST
2. Fashion Item Classification – Fashion-MNIST
3. Cat vs Dog Classification – Kaggle Cat vs Dog
4. CIFAR-10 Image Classification – CIFAR-10
5. Traffic Sign Recognition – GTSRB
6. Face Mask Detection – Kaggle Face Mask Dataset
7. Fruits Classification – Fruits 360
8. Pneumonia Detection – Chest X-ray Pneumonia Dataset

Intermediate Level

9. Facial Emotion Recognition – FER2013
10. Plant Disease Detection – PlantVillage
11. Dog Breed Classification – Stanford Dogs Dataset
12. Landmark Recognition – Google Landmarks v2
13. Car Damage Detection – Car Damage Dataset
14. Skin Cancer Classification – ISIC Dataset
15. Wildlife Species Detection – Snapshot Serengeti
16. Food Image Classification – Food-101
17. Waste/Garbage Classification – TACO Dataset

Advanced Level

18. Object Detection – COCO Dataset
19. Pedestrian Detection – Caltech Pedestrian Dataset
20. Number Plate Recognition – OpenALPR Dataset
21. Face Recognition System – LFW Dataset
22. Tumor Detection – Brain MRI Dataset
23. Satellite Image Classification – EuroSAT

24. Drone-based Object Detection – VisDrone Dataset

25. Lane Detection for Autonomous Driving – TuSimple Dataset