

4. Add **SMS/Email alert system** for critical detections.
5. Deploy on **Raspberry Pi** for portable CCTV monitoring.

5.2 Conclusion:

The VisionGuard CCTV system successfully demonstrates how AI-based object classification can make surveillance smarter, storage-efficient, and more actionable. By combining deep learning with real-time monitoring, it reduces unnecessary recordings while ensuring important events are captured. The system's modular design allows easy adaptation to different environments and datasets, making it a flexible solution for modern surveillance needs.

5.3 References

1. TensorFlow Documentation – <https://www.tensorflow.org/>
2. Keras API Reference – <https://keras.io/>
3. OpenCV Documentation – <https://docs.opencv.org/>
4. CIFAR-10 Dataset – <https://www.cs.toronto.edu/~kriz/cifar.html>