Live Object Detection Using Python

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Abstract: *This project presents a real-time object detection system designed for applications such as surveillance, autonomous navigation, robotics, and interactive technologies. By leveraging Python, OpenCV, and deep learning frameworks like TensorFlow and PyTorch, the system processes live video input to detect and classify objects using pre-trained models such as YOLO, SSD, and Faster R-CNN. The implementation emphasizes real-time performance, accuracy, and low false positive rates. The system's design ensures scalability and adaptability, making it suitable for deployment across various platforms requiring efficient live object detection capabilities*

Keywords*: Object Detection, Real-Time Processing, OpenCV, YOLO, Deep Learning, Python*