

pre-trained models in deep learning and the libraries for various detection tasks:

### **Pre-trained models in Deep Learning:**

1. **GoogLeNet, VGG-16, VGG-19, and AlexNet:** These are basic models with simple architectures to get you started. [They tend to have fewer layers, and allow for quick iterations on preprocessing and training options<sup>1</sup>.](#)
2. **ResNet-50, Inception-v3, Densenet-201, Xception:** [These models cover your image-based workflows, such as image classification, object detection, and semantic segmentation<sup>1</sup>.](#)
3. **SqueezeNet, MobileNet-v2, ShuffLeNet, NASNetMobile:** [These models are intended to have a low-memory footprint, for embedded devices like Raspberry Pi<sup>1</sup>.](#)

### **Libraries for Image Detection:**

1. **OpenCV:** [It is often deployed for computer vision tasks like face detection, object detection, face recognition, image segmentation, and much more<sup>2</sup>.](#)
2. **Scikit-Image:** [It is used for nearly every computer vision task<sup>2</sup>.](#)

### **Libraries for Object Detection:**

1. **TensorFlow:** [It provides a TF-Hub module trained to perform object detection<sup>3</sup>.](#)
2. **Detectron by facebookresearch:** [It performs object detection with various state-of-the-art machine learning algorithms like Mask R-CNN and RetinaNet<sup>4</sup>.](#)

### **Libraries for Text Detection:**

1. **OpenCV:** [It can be used to detect the text in an image and save it to a text file<sup>5</sup>.](#)
2. **Google's CLD 2 and CLD 3, langid, fastText and langdetect:** [These are comprehensive open source libraries for natural language processing<sup>6</sup>.](#)

### **Libraries for Face Detection:**

1. **ageitgey/face\_recognition:** [This is a simple command-line program that you can use to recognize faces in a photograph or folder full of photographs<sup>7</sup>.](#)
2. **deepinsight/insightface:** [It performs state-of-the-art 2D and 3D Face Analysis<sup>7</sup>.](#)