

Guided Projects Artificial Intelligence & Machine Learning

Guided Projects: Supervised Learning

Text Detection

Text detection is the process of detecting the **text present** in the image, followed by surrounding it with a **rectangular bounding box**. Text detection can be carried out using **image-based techniques or machine learning-based techniques**. In image-based techniques, an image is segmented into multiple segments, and statistical features of connected components are utilised to form the text. Whereas, Machine learning approaches use support vector machines and **convolutional neural networks** to classify the components into **text and non-text**.

Question:

Implement a text detection and extraction model using OpenCV and OCR. The necessary steps that you need to perform are:

1. Image preprocessing
2. Find possible contours that can represent the textual areas.
3. Apply optical character recognition (using python-tesseract, google OCR engine).

For Reference: [Hyperlink](#)