

The OCR process refers to identifying and converting printed or handwritten text characters into machine-encoded text. OCR recognition accuracy can vary depending on several factors, such as the quality of the input image, the font type and size, and the language being recognized. Finally, postprocessing of recognized text is performed to remove errors from text and improve accuracy and overall results of OCR. Feature extraction is the process of identifying and extracting the relevant features of each character, such as its shape, size, and orientation. It typically involves several steps, including preprocessing, segmentation, recognition, and postprocessing. During preprocessing, the input image is cleaned up and enhanced to improve the quality of recognition. Segmentation involves breaking the image into individual or groups of letters or characters. In recognition, the characters are classified by comparing them to a set of known characters, and the best match is selected as the recognized character. We have provided a high-level description of the various techniques and methods involved in the OCR process in Table 4. The flow of the overall OCR process is shown in Figure 4.