# Extracting text from images

Here are the few package names for text extraction from images:
- Tesseract (via pytesseract)
- EasyOCR
- Keras OCR
- Google Cloud Vision API
- Microsoft Azure Cognitive Services - Computer Vision API

I have used the "Keras OCR" package as an example to build the architecture for extracting text from images.

Architecture Overview:

Input Image

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Preprocessing

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Keras OCR Model

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Text Extraction

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Post - Preprocessing

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Output
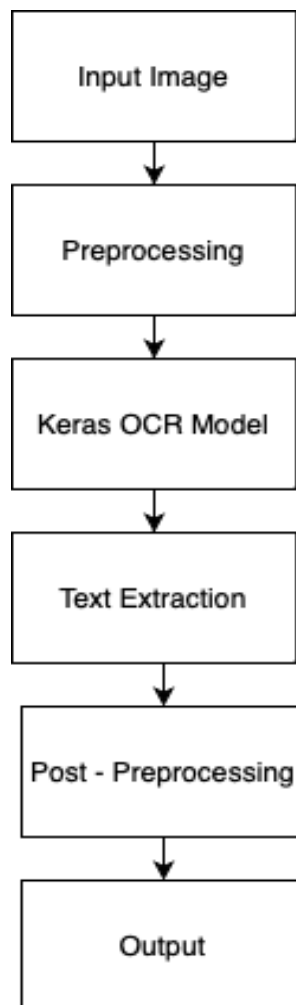
- **Input Image:** The OCR process starts with an input image containing text that needs to be extracted.
- **Preprocessing:** The input image undergoes preprocessing steps such as resizing, normalization, and noise reduction to improve OCR accuracy.
- **Keras OCR Model:** A deep learning model, typically based on Convolutional Neural Networks (CNNs) or Recurrent Neural Networks (RNNs), is used for text recognition. This model is trained on labeled image-text pairs.
- **Text Extraction:** The trained model extracts text from the preprocessed image, generating output in the form of recognized text characters or words.
- **Post-processing:** Optional post-processing steps such as spell checking, formatting corrections, or language translation may be applied to the extracted text.
- **Output:** The final output is the extracted and processed text, ready for further analysis or use in downstream applications.