Optical Character Recognition (OCR) with Google Cloud Vision

- **Text Detection:** Detects text in various languages and scripts.
- **Layout Analysis:** Identifies text blocks, paragraphs, words, and characters.
- **Versatility:** Supports multiple file formats including images and PDFs.

Benefits:

- **High Accuracy:** Delivers state-of-the-art text recognition performance.
- **Multilingual Support:** Recognizes text in a wide range of languages.
- **Integration:** Easily integrates with other Google Cloud services for scalable deployment.

Usage:

- **Google Cloud Vision API:** The OCR capabilities can be accessed through the Vision API.
- **Example Code:**
- from google.cloud import vision
- import io

- # Initialize the client
- client = vision.ImageAnnotatorClient()
- # Load the image
- with io.open('path_to_your_image.jpg', 'rb') as image_file:
- content = image_file.read()
- image = vision.Image(content=content)
- # Perform text detection
- response = client.text_detection(image=image)
- texts = response.text_annotations
- for text in texts:
- print('\n"{}"‘. format(text.description))
- vertices = (['({}, {})’. format (vertex.x, vertex.y)
- for vertex in text.bounding_poly.vertices])
- print ('bounds: {}’. format (',’. join(vertices)))

Resources and Links:

- **Google Cloud Blog:** Extracting Text from Images with Google Cloud Vision
- https://cloud.google.com/blog/topics/developers-practitioners/extracting-text-images-google-cloud-vision
- Google Cloud Documentation: Google Cloud Vision API
- https://cloud.google.com/vision/docs/ocr

- GitHub Repository: Google Cloud Vision Samples

https://github.com/GoogleCloudPlatform/python-docs-samples/tree/master/vision/cloud-client