Structure

RecognizeTextRequest

An image-analysis request that recognizes text in an image.

iOS 18.0+ | iPadOS 18.0+ | macOS 15.0+ | tvOS 18.0+ | visionOS 2.0+

```
struct RecognizeTextRequest
```

Overview

This request generates a collection of `RecognizedTextObservation` objects that describe the text the request detects. By default, a text-recognition request first locates all possible glyphs or characters in the input image, and then analyzes each string. To specify or limit the languages to find in the request, set `recognitionLanguages` to an array that contains the names of the languages of text you want to recognize.

Topics

Creating a request

`init(RecognizeTextRequest.Revision?)`

Creates a text-recognition request.

Getting the revision

`let revision: RecognizeTextRequest.Revision`

The algorithm or implementation the request uses.

`static let supportedRevisions: [RecognizeTextRequest.Revision]`

The collection of revisions the request supports.

`enum Revision`

A type that describes the algorithm or implementation that the request performs.

Inspecting a request

`var automaticallyDetectsLanguage: Bool`

A Boolean value that indicates whether to attempt detecting the language to use the appropriate model for recognition and language correction.

`var usesLanguageCorrection: Bool`

A Boolean value that indicates whether the request applies language correction during the recognition process.

`var supportedRecognitionLanguages: [Locale.Language]`

The identifiers of the languages that the request supports.

`var customWords: [String]`

An array of strings to supplement the recognized languages at the word-recognition stage.

`var minimumTextHeightFraction: Float`

The minimum height, relative to the image height, of the text to recognize.

`var recognitionLanguages: [Locale.Language]`

An array of languages to detect, in priority order.

`var recognitionLevel: RecognizeTextRequest.RecognitionLevel`

A value that determines whether the request prioritizes accuracy or speed in text recognition.

`enum RecognitionLevel`

Constants that identify the performance and accuracy of the text recognition.

Performing a request

`func perform(on: URL, orientation: CGImagePropertyOrientation?) async throws -> Self.Result`

Performs the request on an image URL and produces observations.

Required Default implementations provided.

`func perform(on: Data, orientation: CGImagePropertyOrientation?) async throws -> Self.Result`

Performs the request on image data and produces observations.

Required Default implementations provided.

`func perform(on: CGImage, orientation: CGImagePropertyOrientation?) async throws -> Self.Result`

Performs the request on a Core Graphics image and produces observations.

Required Default implementations provided.

`func perform(on: CVPixelBuffer, orientation: CGImagePropertyOrientation?) async throws -> Self.Result`

Performs the request on a pixel buffer and produces observations.

Required Default implementations provided.

`func perform(on: CMSampleBuffer, orientation: CGImagePropertyOrientation?) async throws -> Self.Result`

Performs the request on a Core Media buffer and produces observations.

Required Default implementations provided.

`func perform(on: CIImage, orientation: CGImagePropertyOrientation?) async throws -> Self.Result`

Performs the request on a Core Image image and produces observations.

Required Default implementations provided.

`struct RecognizedTextObservation`

An object that contains information about both the location and content of text and glyphs that the framework recognizes in an image.

Relationships

Conforms To

`CustomStringConvertible`
`Equatable`
`Hashable`
`ImageProcessingRequest`
`Sendable`
`SendableMetatype`

`VisionRequest`

See Also

Text detection

{} Recognizing tables within a document

Scan a document containing a contact table and extract the content within the table in a formatted way.

{} Locating and displaying recognized text

Perform text recognition on a photo using the Vision framework's text-recognition request.

`struct RecognizeDocumentsRequest`

An image-analysis request to scan an image of a document and provide information about its structure.

`struct DocumentObservation`

Information about the sections of content that an image-analysis request detects in a document.

`struct DetectTextRectanglesRequest`

An image-analysis request that finds regions of visible text in an image.