

[Vision](#) / DetectContoursRequest

Structure

DetectContoursRequest

A request that detects the contours of the edges of an image.

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

```
struct DetectContoursRequest
```

Overview

This request generates a [ContoursObservation](#) object that describes the contours in an image.

Topics

Creating a request

```
init(DetectContoursRequest.Revision?)
```

Creates a contour-detection request.

Getting the revision

```
let revision: DetectContoursRequest.Revision
```

The algorithm or implementation the request uses.

```
static let supportedRevisions: [DetectContoursRequest.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 contrastAdjustment: Float

The amount by which to adjust the image contrast.

var contrastPivot: Float?

The pixel value to use as a pivot for the contrast.

var detectsDarkOnLight: Bool

A Boolean value that indicates whether the request detects a dark object on a light background to aid in detection.

var maximumImageDimension: Int

The maximum image dimension to use for contour detection.

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 ContoursObservation
```

An object that represents the detected contours in an image.

Relationships

Conforms To

CustomStringConvertible

Equatable

Hashable

ImageProcessingRequest

Sendable

SendableMetatype

VisionRequest

See Also

Trajectory, contour, and horizon detection

```
class DetectTrajectoriesRequest
```

A request that detects the trajectories of shapes moving along a parabolic path.

```
struct DetectHorizonRequest
```

An image-analysis request that determines the horizon angle in an image.