

[Vision](#) / `GenerateForegroundInstanceMaskRequest`

Structure

GenerateForegroundInstanceMaskRequest

A request that generates an instance mask of noticeable objects to separate from the background.

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

```
struct GenerateForegroundInstanceMaskRequest
```

Overview

This request generates an [InstanceMaskObservation](#) object with instance-mask data.

Topics

Creating a request

```
init(GenerateForegroundInstanceMaskRequest.Revision?)
```

Creates a foreground instance-mask request.

Getting the revision

```
let revision: GenerateForegroundInstanceMaskRequest.Revision
```

The algorithm or implementation the request uses.

```
static let supportedRevisions: [GenerateForegroundInstanceMaskRequest.  
Revision]
```

The collection of revisions the request supports.

```
enum Revision
```

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

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: CGImageProperty  
Orientation?) 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 InstanceMaskObservation
```

An observation that contains an instance mask that labels instances in the mask.

Relationships

Conforms To

CustomStringConvertible
Equatable
Hashable
ImageProcessingRequest
Sendable
SendableMetatype
VisionRequest

See Also

Image feature print and background removal

```
struct GenerateImageFeaturePrintRequest
```

An image-based request to generate feature prints from an image.