Class

TrackTranslationalImageRegistrationRequest

An image-analysis request that you track over time to determine the affine transform necessary to align the content of two images.

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

```
final class TrackTranslationalImageRegistrationRequest
```

Overview

This request generates an `ImageTranslationAlignmentObservation` object that describes the transform data the request detects.

Topics

Creating a request

`init(TrackTranslationalImageRegistrationRequest.Revision?, frameAnalysisSpacing: CMTime?)`

Creates an image-alignment tracking request to determine the affine transform.

Getting the revision

`let revision: TrackTranslationalImageRegistrationRequest.Revision`

The algorithm or implementation the request uses.

`static let supportedRevisions: [TrackTranslationalImageRegistrationRequest.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

`enum ComputeStage`

Types that represent the compute stage.

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 ImageTranslationAlignmentObservation`

Affine transform information that an image-alignment request produces.

Relationships

Conforms To

`CustomStringConvertible`
`Equatable`
`Hashable`
`ImageProcessingRequest`
`Sendable`
`SendableMetatype`
`StatefulRequest`
`TargetedRequest`
`VisionRequest`

See Also

Image alignment

`class TrackHomographicImageRegistrationRequest`

An image-analysis request that you track over time to determine the perspective warp matrix necessary to align the content of two images.

`protocol TargetedRequest`

A type for analyzing two images together.