

[Vision](#) / DetectHumanBodyPose3DRequest

## Class

# DetectHumanBodyPose3DRequest

A request that detects points on human bodies in 3D space, relative to the camera.

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

```
final class DetectHumanBodyPose3DRequest
```

## Overview

This request generates a collection of [HumanBodyPose3DObservation](#) objects that describe the position of each body the request detects. If the system allows it, the request uses [AVDepthData](#) information to improve the accuracy.

## Topics

### Creating a request

```
init(DetectHumanBodyPose3DRequest.Revision?, frameAnalysisSpacing: CMTime?)
```

Creates a 3D human body pose request.

### Getting the revision

```
let revision: DetectHumanBodyPose3DRequest.Revision
```

The algorithm or implementation the request uses.

```
static let supportedRevisions: [DetectHumanBodyPose3DRequest.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 supportedJointNames: [HumanBodyPose3DObservation.JointName]
```

The joint names the request supports.

```
var supportedJointsGroupNames: [HumanBodyPose3DObservation.JointsGroup  
Name]
```

The joint group names the request supports.

## 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 HumanBodyPose3DObservation
```

An observation that provides the 3D body points the request recognizes.

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# Relationships

## Conforms To

- CustomStringConvertible
  - Equatable
  - Hashable
  - ImageProcessingRequest
  - Sendable
  - SendableMetatype
  - StatefulRequest
  - VisionRequest
- 

# See Also

## 3D body pose detection

```
struct Joint3D
```

An object that represents a body pose joint in 3D space.