Documentation

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API Collection

Applying projective transformations to images

Warp images in three dimensions.

Topics

Computing a projective transformation from source and destination quadrilaterals

Transforming an image in three dimensions

Create and use a projective transformation to apply a perspective warp to an image.

```
func vImageGetPerspectiveWarp(UnsafePointer<(Float, Float)>, UnsafePointer<(Float, Float)>, UnsafeMutablePointer<vImage_PerpsectiveTransform>, vImage_Flags) -> vImage_Error
```

Returns a projective-transformation structure that defines the mapping between a source quadrilateral and a destination quadrilateral.

```
struct vImage_PerpsectiveTransform
```

A projective-transformation matrix.

Warping planar buffers

```
func vImagePerspectiveWarp_Planar8(UnsafePointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafeMutableRawPointer!, UnsafePointer<vImage_PerpsectiveTransform>, vImage_WarpInterpolation, Pixel_8, vImage_Flags) -> vImage_Error
```

Applies a perspective warp to an 8-bit planar image.

```
func vImagePerspectiveWarp_Planar16F(UnsafePointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafeMutableRawPointer!, UnsafePointer<vImage_PerpsectiveTransform>, vImage_WarpInterpolation, Pixel_16F, vImage_Flags) -> vImage_Error
```

Applies a perspective warp to a floating-point 16-bit planar image.

```
func vImagePerspectiveWarp_Planar16U(UnsafePointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafeMutableRawPointer!, UnsafePointer<vImage_PerpsectiveTransform>, vImage_WarpInterpolation, Pixel_16U, vImage_Flags) -> vImage_Error
```

Applies a perspective warp to a unsigned 16-bit planar image.

Warping interleaved buffers

```
func vImagePerspectiveWarp_ARGB8888(UnsafePointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafeMutableRawPointer!, UnsafePointer<vImage_PerpsectiveTransform>, vImage_WarpInterpolation, UnsafeMutablePointer<UInt8>!, vImage_Flags) -> vImage_Error
```

Applies a perspective warp to an 8-bit-per-channel, four-channel interleaved image.

```
func vImagePerspectiveWarp_ARGB16F(UnsafePointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafeMutableRawPointer!, UnsafePointer<vImage_PerpsectiveTransform>, vImage_WarpInterpolation, UnsafeMutablePointer<UInt16>!, vImage_Flags) -> vImage_Error
```

Applies a perspective warp to a floating-point 16-bit , four-channel interleaved image.

```
func vImagePerspectiveWarp_ARGB16U(UnsafePointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafeMutableRawPointer!, UnsafePointer<vImage_PerpsectiveTransform>, vImage_WarpInterpolation, UnsafeMutablePointer<UInt16>!, vImage_Flags) -> vImage_Error
```

Applies a perspective warp to an unsigned 16-bit , four-channel interleaved image.

See Also

Applying geometric transforms to image buffers

Resampling in vImage

Learn how vImage resamples image data during geometric operations.

Applying affine transformations to images

Translate, rotate, and scale images.

Image reflection

Reflect images horizontally and vertically.

Image shearing

Shear images horizontally and vertically.

Image rotation

Rotate images by arbitrary angles or by multiples of 90 degrees.

Image scaling

Scale interlaced and planar images.

Getting the Buffer Size

Calculate the size of the temporary buffer needed by a high-level geometry functions.