Accelerate / ⋯ / vImage Operations / Image rotation

API Collection

Image rotation

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

Topics

Rotating 8-bit-per-channel buffers by any angle

```
func vImageRotate_Planar8(UnsafePointer<vImage_Buffer>, UnsafePointer<v
Image_Buffer>, UnsafeMutableRawPointer!, Float, Pixel_8, vImage_Flags)
-> vImage_Error
```

Rotates an 8-bit planar image by any angle, which you specify in radians.

```
func vImageRotate_ARGB8888(UnsafePointer<vImage_Buffer>, UnsafePointer<
vImage_Buffer>, UnsafeMutableRawPointer!, Float, UnsafePointer<UInt8>!,
vImage_Flags) -> vImage_Error
```

Rotates an 8-bit-per-channel, 4-channel interleaved image by any angle, which you specify in radians.

Rotating 16-bit-per-channel buffers by any angle

```
func vImageRotate_Planar16F(UnsafePointer<vImage_Buffer>, UnsafePointer
<vImage_Buffer>, UnsafeMutableRawPointer!, Float, Pixel_16F, vImage
_Flags) -> vImage_Error
```

Rotates a floating-point 16-bit planar image by any angle, which you specify in radians.

```
func vImageRotate_CbCr16F(UnsafePointer<vImage_Buffer>, UnsafePointer<v
Image_Buffer>, UnsafeMutableRawPointer!, Float, UnsafePointer<UInt16>!,
vImage_Flags) -> vImage_Error
```

Rotates a floating-point 16-bit-per-channel, 2-channel interleaved image by any angle, which you specify in radians.

```
func vImageRotate_ARGB16U(UnsafePointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafeMutableRawPointer!, Float, UnsafePointer<UInt16>!, vImage_Flags) -> vImage_Error
```

Rotates an unsigned 16-bit-per-channel, 4-channel interleaved image by any angle, which you specify in radians.

```
func vImageRotate_ARGB16S(UnsafePointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafeMutableRawPointer!, Float, UnsafePointer<Int16>!, vImage_Flags) -> vImage_Error
```

Rotates a signed 16-bit-per-channel, 4-channel interleaved image by any angle, which you specify in radians.

```
func vImageRotate_ARGB16F(UnsafePointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafeMutableRawPointer!, Float, UnsafePointer<UInt16>!, vImage_Flags) -> vImage_Error
```

Rotates a floating-point 16-bit-per-channel, 4-channel interleaved image by any angle, which you specify in radians.

Rotating 32-bit-per-channel buffers by any angle

```
func vImageRotate_PlanarF(UnsafePointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafeMutableRawPointer!, Float, Pixel_F, vImage_Flags) -> vImage_Error
```

Rotates a 32-bit planar image by any angle, which you specify in radians.

```
func vImageRotate_ARGBFFFF(UnsafePointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UnsafeMutableRawPointer!, Float, UnsafePointer<Float>!, vImage_Flags) -> vImage_Error
```

Rotates a 32-bit-per-channel, 4-channel interleaved image by any angle, which you specify in radians.

Rotating 8-bit-per-channel buffers by multiples of 90°

```
func vImageRotate90_Planar8(UnsafePointer<vImage_Buffer>, UnsafePointer<vImage_Buffer>, UInt8, Pixel_8, vImage_Flags) -> vImage_Error
```

Rotates an 8-bit planar image by a multiple of 90°.

```
func vImageRotate90_ARGB8888(UnsafePointer<vImage_Buffer>, Unsafe
Pointer<vImage_Buffer>, UInt8, UnsafePointer<UInt8>, vImage_Flags) -> v
Image_Error
```
Rotates an 8-bit-per-channel, 4-channel interleaved image by a multiple of 90°.

Rotating 16-bit-per-channel buffers by multiples of 90°

```
func vImageRotate90_Planar16U(UnsafePointer<vImage_Buffer>, Unsafe
Pointer<vImage_Buffer>, UInt8, Pixel_16U, vImage_Flags) -> vImage_Error
```
Rotates an unsigned 16-bit planar image by a multiple of 90°.

```
func vImageRotate90_Planar16F(UnsafePointer<vImage_Buffer>, Unsafe
Pointer<vImage_Buffer>, UInt8, Pixel_16F, vImage_Flags) -> vImage_Error
```
Rotates a floating-point 16-bit planar image by a multiple of 90°.

```
func vImageRotate90_CbCr16F(UnsafePointer<vImage_Buffer>, UnsafePointer
<vImage_Buffer>, UInt8, UnsafePointer<UInt16>!, vImage_Flags) -> vImage
_Error
```
Rotates a floating-point 16-bit-per-channel, 2-channel interleaved image by a multiple of 90°.

```
func vImageRotate90_ARGB16U(UnsafePointer<vImage_Buffer>, UnsafePointer
<vImage_Buffer>, UInt8, UnsafePointer<UInt16>, vImage_Flags) -> vImage
_Error
```
Rotates an unsigned 16-bit-per-channel, 4-channel interleaved image by a multiple of 90°.

```
func vImageRotate90_ARGB16S(UnsafePointer<vImage_Buffer>, UnsafePointer
<vImage_Buffer>, UInt8, UnsafePointer<Int16>, vImage_Flags) -> vImage
_Error
```
Rotates a signed 16-bit-per-channel, 4-channel interleaved image by a multiple of 90°.

```
func vImageRotate90_ARGB16F(UnsafePointer<vImage_Buffer>, UnsafePointer
<vImage_Buffer>, UInt8, UnsafePointer<UInt16>!, vImage_Flags) -> vImage
_Error
```
Rotates a floating-point 16-bit-per-channel, 4-channel interleaved image by a multiple of 90°.

Rotating 32-bit-per-channel buffers by multiples of 90°

```
func vImageRotate90_PlanarF(UnsafePointer<vImage_Buffer>, UnsafePointer
<vImage_Buffer>, UInt8, Pixel_F, vImage_Flags) -> vImage_Error
```
Rotates a 32-bit planar image by a multiple of 90°.

```
func vImageRotate90_ARGBFFFF(UnsafePointer<vImage_Buffer>, Unsafe
Pointer<vImage_Buffer>, UInt8, UnsafePointer<Float>, vImage_Flags) -> v
Image_Error
```

Rotates a 32-bit-per-channel, 4-channel interleaved image by a multiple of 90°.

Specifying the angle of a multiple of 90° rotation

☰ Rotation constants

The number of degrees to rotate an 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.

☰ Applying projective transformations to images

Warp images in three dimensions.

☰ Image reflection

Reflect images horizontally and vertically.

☰ Image shearing

Shear images horizontally and vertically.

☰ 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.