Documentation Language: Swift

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Instance Method

shear(direction:translate:slope:resamplingFilter:backgroundColor:destination:)

Performs a horizontal or vertical shear operation on an unsigned 16-bit planar pixel buffer.

iOS 16.0+ | iPadOS 16.0+ | Mac Catalyst | macOS 13.0+ | tvOS 16.0+ | visionOS | watchOS 9.0+

```
func shear(
    direction: vImage.ShearDirection,
    translate: Float,
    slope: Float,
    resamplingFilter: ResamplingFilter,
    backgroundColor: Pixel_16U? = Pixel_16U(0),
    destination: vImage.PixelBuffer<Format>
)
```

Available when `Format` is `vImage.Planar16U`.

Parameters

`direction`

An enumeration that specifies the shear direction.

`translate`

A value that specifies the translation.

`slope`

The slope of the front edge of the sheared image.

`resamplingFilter`

The resampling filter that the function uses. For more information, see Reducing artifacts with custom resampling filters.

`backgroundColor`

An optional background color. If you pass `nil`, the operation uses the `kvImageEdgeExtend` flag to extend the edges of the image infinitely.

`destination`

The destination pixel buffer.

See Also

Related Documentation

Applying geometric transforms to images

Reflect, shear, rotate, and scale image buffers using vImage.

Shearing images

```
func shear<T>(direction: vImage.ShearDirection, translate: T, slope: T,
resamplingFilter: ResamplingFilter, backgroundColor: Pixel_8?,
destination: vImage.PixelBuffer<Format>)
```

Performs a horizontal or vertical shear operation on an 8-bit planar pixel buffer.

```
func shear<T>(direction: vImage.ShearDirection, translate: T, slope: T,
resamplingFilter: ResamplingFilter, backgroundColor: Pixel_16F?, use
Float16Accumulator: Bool, destination: vImage.PixelBuffer<Format>)
```

Performs a horizontal or vertical shear operation on a floating-point 16-bit planar pixel buffer.

```
func shear<T>(direction: vImage.ShearDirection, translate: T, slope: T,
resamplingFilter: ResamplingFilter, backgroundColor: Pixel_F?,
destination: vImage.PixelBuffer<Format>)
```

Performs a horizontal or vertical shear operation on a 32-bit planar pixel buffer.

```
func shear<T>(direction: vImage.ShearDirection, translate: T, slope: T,
resamplingFilter: ResamplingFilter, backgroundColor: Pixel_16U16U?,
destination: vImage.PixelBuffer<Format>)
```

Performs a horizontal or vertical shear operation on an unsigned 16-bit-per-channel, two-channel interleaved pixel buffer.

```
func shear(direction: vImage.ShearDirection, translate: Float, slope: Float, resamplingFilter: ResamplingFilter, backgroundColor: Pixel_88?, destination: vImage.PixelBuffer<Format>)
```

Performs a horizontal or vertical shear operation on an 8-bit-per-channel, two-channel interleaved pixel buffer.

```
func shear<T>(direction: vImage.ShearDirection, translate: T, slope: T, resamplingFilter: ResamplingFilter, backgroundColor: Pixel_16F16F?, useFloat16Accumulator: Bool, destination: vImage.PixelBuffer<Format>)
```

Performs a horizontal or vertical shear operation on a floating-point 16-bit-per-channel, two-channel interleaved pixel buffer.

```
func shear<T>(direction: vImage.ShearDirection, translate: T, slope: T, resamplingFilter: ResamplingFilter, backgroundColor: Pixel_8888?, destination: vImage.PixelBuffer<Format>)
```

Performs a horizontal or vertical shear operation on an 8-bit-per-channel, four-channel interleaved pixel buffer.

```
func shear<T>(direction: vImage.ShearDirection, translate: T, slope: T, resamplingFilter: ResamplingFilter, backgroundColor: Pixel_ARGB_16U?, destination: vImage.PixelBuffer<Format>)
```

Performs a horizontal or vertical shear operation on an unsigned 16-bit-per-channel, four-channel interleaved pixel buffer.

```
func shear<T>(direction: vImage.ShearDirection, translate: T, slope: T, resamplingFilter: ResamplingFilter, backgroundColor: Pixel_ARGB_16F?, useFloat16Accumulator: Bool, destination: vImage.PixelBuffer<Format>)
```

Performs a horizontal or vertical shear operation on a floating-point 16-bit-per-channel, four-channel interleaved pixel buffer.

```
func shear<T>(direction: vImage.ShearDirection, translate: T, slope: T, resamplingFilter: ResamplingFilter, backgroundColor: Pixel_FFFF?, destination: vImage.PixelBuffer<Format>)
```

Performs a horizontal or vertical shear operation on a 32-bit-per-channel, four-channel interleaved pixel buffer.

```
enum ShearDirection
```

The shear direction.