Enum ImageFormat

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- Defined in File image_format.hpp

Enum Documentation

enum class holoscan::viz::ImageFormat

Image formats.

{component format}_{numeric format}

- component format
  - indicates the size in bits of the R, G, B and A components if present
- numeric format
  - UNORM - unsigned normalize values, range [0, 1]
  - SNORM - signed normalized values, range [-1,1]
  - UINT - unsigned integer values, range [0,2n-1]
  - SINT - signed integer values, range [-2n-1,2n-1-1]
  - SFLOAT - signed floating-point numbers
  - SRGB - the R, G, and B components are unsigned normalized values that represent values using sRGB nonlinear encoding, while the A component (if one exists) is a regular unsigned normalized value

Values:

enumerator R8_UINT

specifies a one-component, 8-bit unsigned integer format that has a single 8-bit R component

enumerator R8_SINT

specifies a one-component, 8-bit signed integer format that has a single 8-bit R component

enumerator R8_UNORM

specifies a one-component, 8-bit unsigned normalized format that has a single 8-bit R component

enumerator R8_SNORM

specifies a one-component, 8-bit signed normalized format that has a single 8-bit R component

enumerator R8_SRGB

specifies a one-component, 8-bit unsigned normalized format that has a single 8-bit R component stored with sRGB nonlinear encoding

enumerator R16_UINT

specifies a one-component, 16-bit unsigned integer format that has a single 16-bit R component

enumerator R16_SINT

specifies a one-component, 16-bit signed integer format that has a single 16-bit R component

enumerator R16_UNORM

specifies a one-component, 16-bit unsigned normalized format that has a single 16-bit R component

enumerator R16_SNORM

specifies a one-component, 16-bit signed normalized format that has a single 16-bit R component

enumerator R16_SFLOAT

specifies a one-component, 16-bit signed floating-point format that has a single 16-bit R component

enumerator R32_UINT

specifies a one-component, 16-bit unsigned integer format that has a single 16-bit R component

enumerator R32_SINT

specifies a one-component, 16-bit signed integer format that has a single 16-bit R component

enumerator R32_SFLOAT

specifies a one-component, 32-bit signed floating-point format that has a single 32-bit R component

enumerator R8G8B8_UNORM

specifies a three-component, 24-bit unsigned normalized format that has a 8-bit R component in byte 0, a 8-bit G component in byte 1, and a 8-bit B component in byte 2

enumerator R8G8B8_SNORM

specifies a three-component, 24-bit signed normalized format that has a 8-bit R component in byte 0, a 8-bit G component in byte 1, and a 8-bit B component in byte 2

enumerator R8G8B8_SRGB

specifies a three-component, 24-bit unsigned normalized format that has a 8-bit R component stored with sRGB nonlinear encoding in byte 0, a 8-bit G component stored with sRGB nonlinear encoding in byte 1, and a 8-bit B component stored with sRGB nonlinear encoding in byte 2

enumerator R8G8B8A8_UNORM

specifies a four-component, 32-bit unsigned normalized format that has a 8-bit R component in byte 0, a 8-bit G component in byte 1, a 8-bit B component in byte 2, and a 8-bit A component in byte 3

enumerator R8G8B8A8_SNORM

specifies a four-component, 32-bit signed normalized format that has a 8-bit R component in byte 0, a 8-bit G component in byte 1, a 8-bit B component in byte 2,

and a 8-bit A component in byte 3

enumerator R8G8B8A8_SRGB

specifies a four-component, 32-bit unsigned normalized format that has a 8-bit R component stored with sRGB nonlinear encoding in byte 0, a 8-bit G component stored with sRGB nonlinear encoding in byte 1, a 8-bit B component stored with sRGB nonlinear encoding in byte 2, and a 8-bit A component in byte 3

enumerator R16G16B16A16_UNORM

specifies a four-component, 64-bit unsigned normalized format that has a 16-bit R component in bytes 0..1, a 16-bit G component in bytes 2..3, a 16-bit B component in bytes 4..5, and a 16-bit A component in bytes 6..7

enumerator R16G16B16A16_SNORM

specifies a four-component, 64-bit signed normalized format that has a 16-bit R component in bytes 0..1, a 16-bit G component in bytes 2..3, a 16-bit B component in bytes 4..5, and a 16-bit A component in bytes 6..7

enumerator R16G16B16A16_SFLOAT

specifies a four-component, 64-bit signed floating-point format that has a 16-bit R component in bytes 0..1, a 16-bit G component in bytes 2..3, a 16-bit B component in bytes 4..5, and a 16-bit A component in bytes 6..7

enumerator R32G32B32A32_SFLOAT

specifies a four-component, 128-bit signed floating-point format that has a 32-bit R component in bytes 0..3, a 32-bit G component in bytes 4..7, a 32-bit B component in bytes 8..11, and a 32-bit A component in bytes 12..15

enumerator D16_UNORM

specifies a one-component, 16-bit unsigned normalized format that has a single 16-bit depth component

enumerator X8_D24_UNORM

specifies a two-component, 32-bit format that has 24 unsigned normalized bits in the depth component, and, optionally, 8 bits that are unused

enumerator D32_SFLOAT

specifies a one-component, 32-bit signed floating-point format that has 32 bits in the depth component