Bilateral Blur Node

The Bilateral Blur node performs a high-quality adaptive blur, blurring the image while retaining sharp edges.

It can be used for various purposes like: smoothing noisy render passes to avoid longer computation times in example ray-traced ambient occlusion, blurry refractions/reflections, soft shadows, or to make non-photorealistic compositing effects.

Inputs

Image

Standard color input. If only the image input is connected, the node blurs the image depending on the edges present in the source image.

Determinator

Which is optional and if the Determinator is connected, it serves as the source for defining edges/borders for the blur in the image. This has great advantage in case the source image is too noisy, but normals in combination with Z-buffer can still define exact borders/edges of objects.

Properties

Iterations

Defines how many times the filter should perform the operation on the image. It practically defines the radius of blur.

Color Sigma

Defines the threshold for which color differences in the image should be taken as edges.

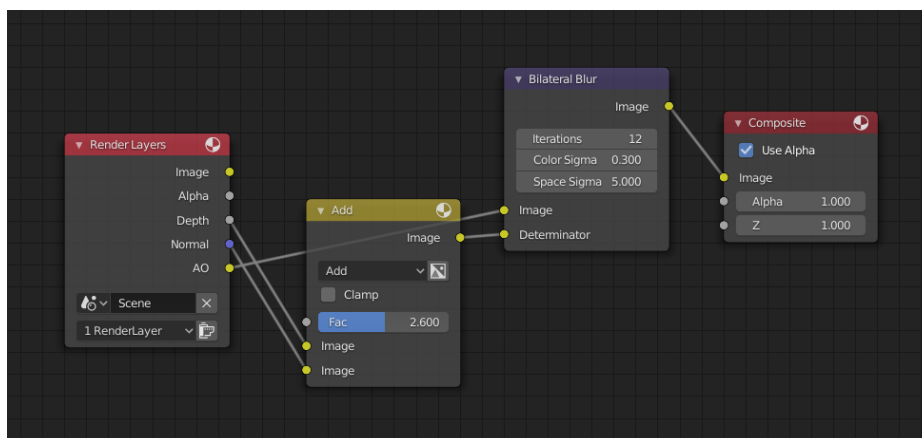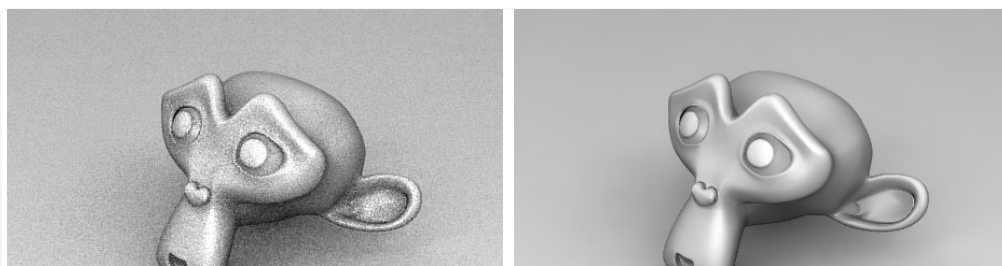### Space Sigma

A fine-tuning variable for blur radius.

Outputs

Image

Standard color output.

Example

Bilateral smoothed Ambient Occlusion. blend-file example

Render result.

Composite.