

# Faking Ambient Occlusion

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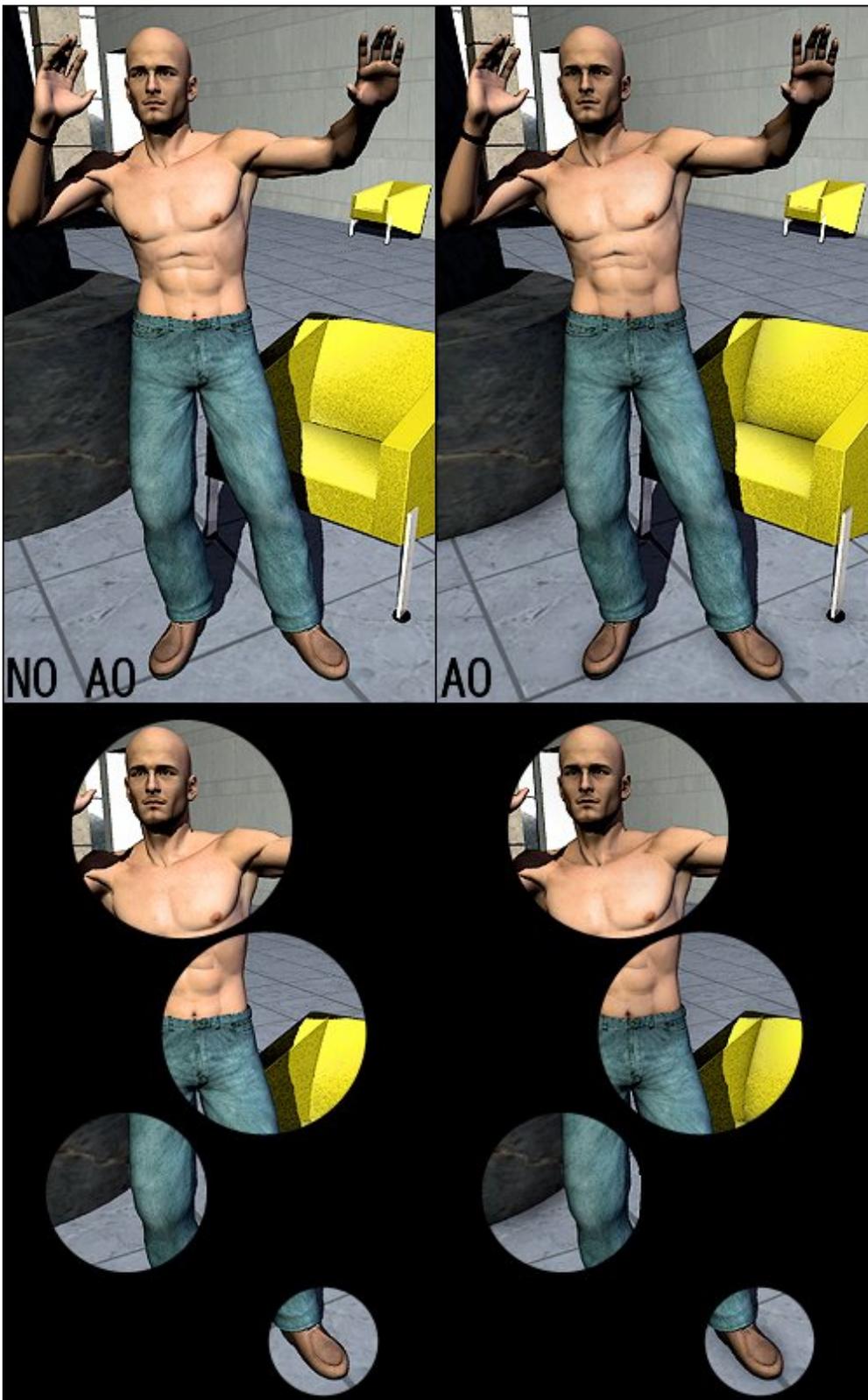
Tools Needed

\* **Poser**

\* **An image editor similar to Photoshop.**

## Introduction

It is possible to use post-[work](#) to simulate the Poser 6 AO feature. AO is about the subtle shadows where things meet in a scene even when well illuminated: floor where the figure and props rest on [it](#), the corners of a rooms where the walls meet, and even the eye sockets of the face or the eyes where the eyelids rest on [them](#). Ambient light is the light that fills a scene due to the illumination bouncing off [one](#) surface onto another; think of the light that refracts off the floor and walls to fill a [room](#) with light. Ambient Occlusion is an attempt to simulate the fact that this ambient light does not find its way into every [nook](#) or cranny in a scene. The surfaces for light to bounce off are simply of less surface area in the corners of a room or where volumes are very close to each other.



Step 1 - The Render and Mask



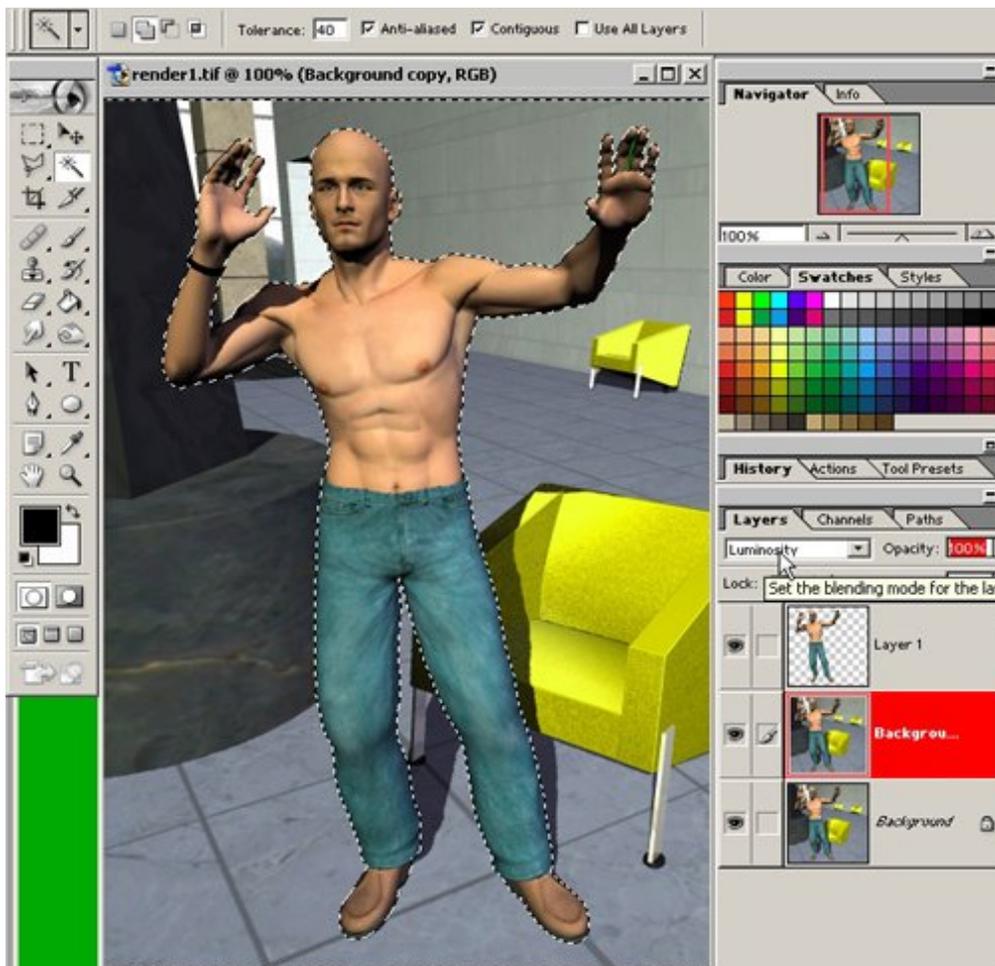
a. Make your Poser Render, P4 or Firefly, and export the image.

b. Now to make a mask for when you do your post-work in Photoshop or some other image open the Hierarchy Editor window and click off the visibility on the UNIVERSE, this should make everything in your scene invisible.

c. Select those elements you wish to isolate from the background, usually the figures and its/their clothing. Clicking the figure visibility should make all its many parts visible at once. Change the background colour to something not found in your render, a vivid green is often used in commercial "blue-screening".

d. Render at the same dimensions as the render you intend to edit.

## Step 2 - Applying the Mask



a. After you have opened your render, open the “mask render” image.

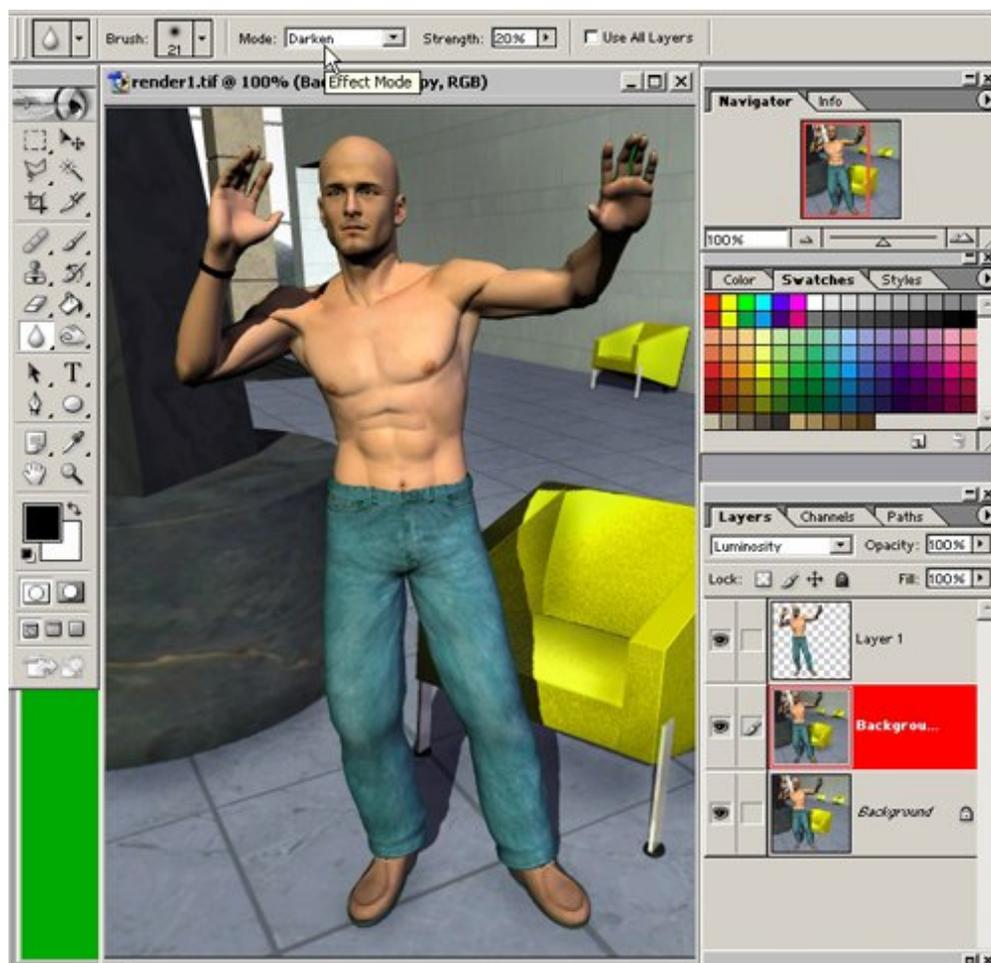
b. Select all on the mask render and copy (Ctrl-A/Ctrl-C), and then paste (Ctrl-V) on the render you are going to be working on... since the dimensions were the same for both renders the new pasted layer should be properly aligned.

c. On this new layer in your main render image use the magic wand selection tool to select the green background. Delete it. You now have a floating copy of the figure/foreground.

d. If there are shadows falling on the figure you will need to delete the mask layer and with the selection intact copy the figure and paste it so it appears in a new layer directly over the background.

e. Deselect all (Ctrl-D).

### Step 3 - Faking the AO



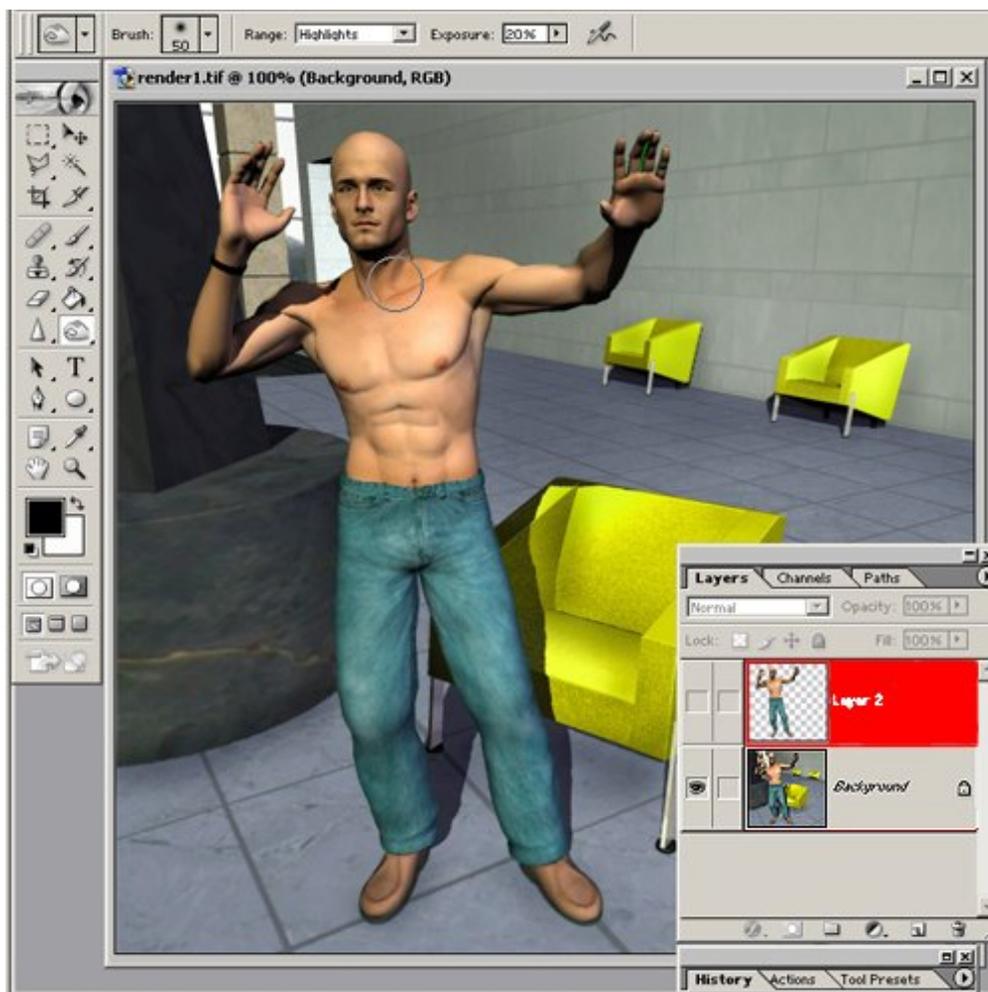
Since your figure is floating in a layer above your background you can now do things like use the burn tool on the wall behind the figure without having to mask the fingers or other details.

a. Go down to the original "background" layer and duplicate it under the floating figure layer to create a "working layer" copy of the background, set this working layer to "luminosity". The reason you have created a working layer for the background is two-fold. It is easily reversible but more importantly, the dodge and burn tools tend to effect the saturation of colours causing unwanted distortion. If you use the dodge and burn tools on a "luminosity" layer they alter the brightness of the image but the other elements of the underlying colour are not altered.

b. Use your burn tool with a soft brush tip on your background working layer. Darken corners where things meet, darken subtly beneath the feet or where ever else the figure meet the ground or another surface.

c. Experiment with using the blur tool set to "darken". The blur "darken" can be used to tremendous effect if it is used carefully, set it at a low opacity and a smallish brush and brush along the edges.

#### Step 4 - AO on the Figure



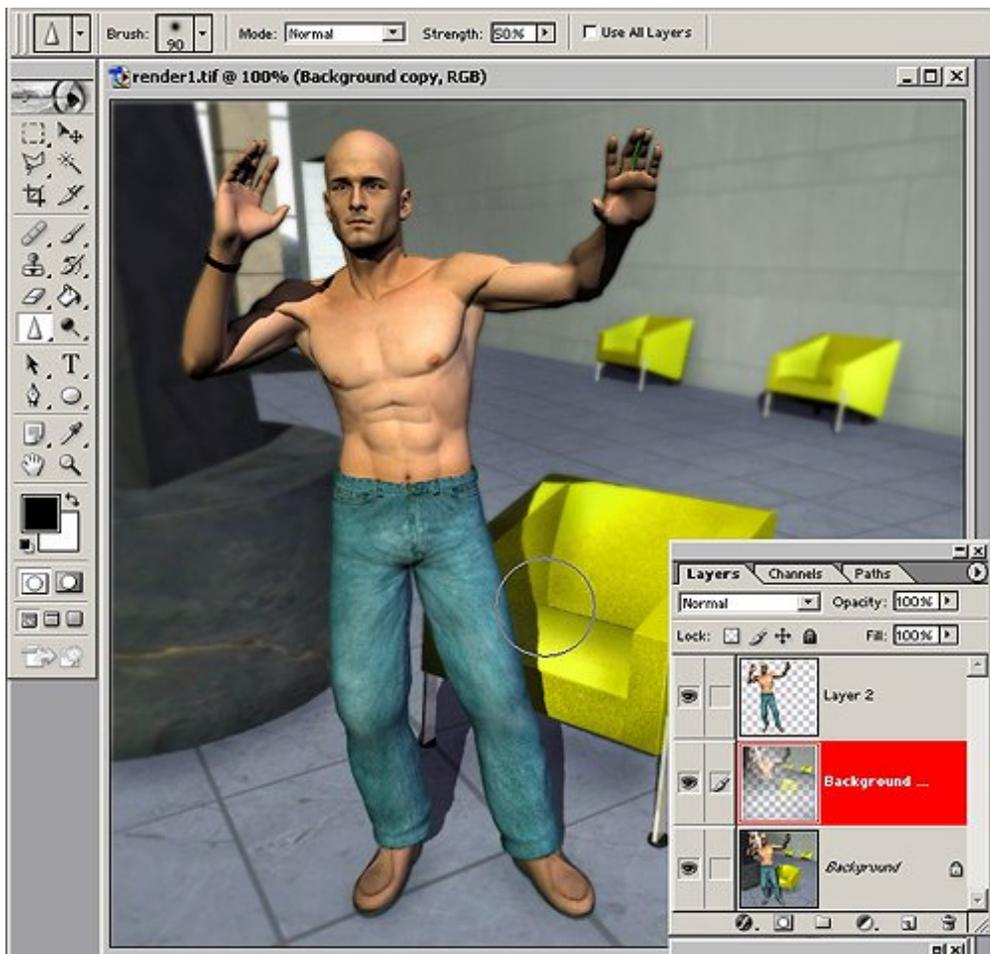
Now go to the floating figure layer and above it make a working layer set to "luminosity".

Think of the nooks and crannies light would probably get into less than represented in the render; the cuffs of a shirt, The neckline and open sleeves of a blouse, where a shirt rests over pants, where the waistline of the pants go over the abdomen, beneath a watch band or jewelery, and more significantly, the neck and collar area beneath the head and even some areas of the face such as the eyes, eye sockets and teeth. I find that blur darken along the lower edge of the upper lip can be very effective.

Try not to give the crossed eye look that P6 AO sometimes gives. You can also bring up some areas of light a little with the dodge tool. Don't forget to blur "darken" the figure where it meets the ground such as at the soles of the feet.

You can use a low opacity eraser to lessen the effect of you dodge and burn although using a layer mask is more adjustable. Layer masks control what is visible in a layer, it is a channel that is displayed as an icon next to its layer icon. Where it is white the layer shows and where it is black the layer is not visible... you can paint with grays to get intermediate opacities.

### Step 5 - Faking Depth of Field



Depth of field is a photographic effect, it is most notable when the foreground is in sharp focus and background is blurry. The depth of field is actually a span of space a certain distance from the camera. Things closer or farther than that band of sharpness will be out of focus. This is due to the way that light rays that are focused by the camera lens onto the film or digital receptors. Depth of field is also effected by the "aperture" as well, this is the hole behind the lens through which the light passes; if the scene is bright the opening can be set small and the span in focus (the depth of field) will be deep, in a dark scene the opening must be larger and the span in focus will be shallow.

- a. Merge each of the working layers to the base layers to which they belong.
- b. Choose the background layer, duplicate it and apply Filter/Blur/Gaussian Blur. Soften the layer as much as you want the burriest background features to be. If you over do it a little you can reduce the effect by a little by adjusting the layer opacity.
- c. With a large soft brush erase this blur level where the things are lined up beneath and along side the figure. That are the same distance from the camera as the figure. Once again, using a layer mask is better than using the eraser if you can learn how to use them.
- d. Go to the flayer where the figure floats and do some subtle work with the blur tool as needed.

## Step 6 - Results



Here you see the finished render after post-work. I wish you could see full sized samples of before and after side by side. The changes are subtle but the overall realism added to the scene is significant.

#### Step 7 - Conclusion



Here are the original render, a Poser 6 AO render, and the original non-AO render after post-work. I have adjusted the levels and saturation. If you don't crop the image as you work it should be easy to soften any work you have done by super imposing the original render at some opacity.

SAVE EARLY AND SAVE OFTEN!