LEVEL OF DIFFICULTY: Moderate

TITLE: Turning A 3D Rendering Into An Illustration

SUBTITLE: Using Photoshop to add personality to 3D renderings

INTRODUCTION
3D renderings can often look cold and impersonal or even cartoonish. They can also appear too crisply detailed . This can cause viewers to concentrate on specific details when they should be focusing on a more general idea or concept. With the techniques covered in this tutorial you will be able to turn your 3D renderings into "hand drawn" looking illustrations.

ABOUT THE AUTHOR
Anthony Dunnigan is currently working as a research scientist and resident artist at FX Palo Alto Laboratory, a silicon valley based research lab. Anthony has produced illustrations, user interfaces, videos, multimedia presentations, printed pieces and websites for a number of organizations including: Rock & Roll Hall of Fame + Museum, United States Olympic Committee (USOC), Key Bank, Eaton Corporation, General Electric, JP Morgan and the Coors Brewing Company. For more information, including an on-line portfolio visit www.dunnigan.net.

1. Getting Started
I'm not going to cover 3D modeling and rendering in this tutorial. There are, however, a few guidelines that should be followed. Pick exciting camera angles; composition is everything. Have a point of view when you light your models. Is the light dramatic or is it soft and gentle? Make sure you include the appropriate level of detail in your 3D rendering. Too much and the final illustration will look cluttered, too little and it might feel "fake". Finally, render a big image. The more pixels that you have to work with the better your final illustration will look. I often work at 150% of the finished size.

2. Open Your Rendering In Photoshop
If your image isn't already flattened do so now. Label this layer "original".

3. Setting Up The Image
Duplicate the "original" layer and name it "base". Adjust the image until it appears just a little brighter than normal. Make sure that there is still a good amount of contrast in the image. From now on we will copy this layer and apply filters to the copies.

4. Apply The "Watercolor" Filter
Duplicate the "base" layer and name it "watercolor". Apply the "Watercolor" filter (Filters/Artistic/Watercolor) . I usually leave the "Shadow Intensity" and "Texture" settings quite low and the "Brush Detail" setting quite high. Adjust the opacity of this layer until the composite image looks pleasing.

5. Apply The "Underpainting" Filter
Duplicate the "base" layer and name it "underpainting". Move this layer to a position above the "watercolor" layer. Add just a little bit of noise to the image (Filters/Noise/Add Noise). Apply the "Underpainting" filter (Filters/Artistic/Underpainting) . I usually pick a medium "Brush Size" and set the "Texture Coverage" quite high. Adjust the opacity of this layer until the composite image looks pleasing.

6. Apply The "Find Edges" Filter
Duplicate the "base" layer and name it "edges". Move this layer to a position above the "Underpainting" layer. Apply the "Find edges" filter (Filters/Stylize/Find Edges) . Adjust the layer's brightness and contrast until you have nice outlines without too much detail. Set the opacity of this

layer to "Multiply"

7. Crosshatching: Step One
Duplicate the "base" layer and name it "right". Move this layer to a position above the "edges" layer. Apply the "Graphic Pen" filter (Filters/Sketch/Graphic Pen) . Set the "Stroke Direction" to "Right Diagonal". Adjust the "Lightness" and "Stroke Length" until you have diagonal lines in only the darker areas of the image. Set the opacity of this layer to "Multiply"

8. Crosshatching: Step Two
Duplicate the "base" layer and name it "left". Move this layer to a position above the "right" layer. Apply the "Graphic Pen" filter (Filters/Sketch/Graphic Pen) . Set the "Stroke Direction" to "Left Diagonal". Adjust the "Lightness" and "Stroke Length" until you have diagonal lines in only the darker areas of the image. Set the opacity of this layer to "Multiply"

9. Dark Shadows
Duplicate the "base" layer and name it "shadows". Move this layer to a position above the "left" layer. Desaturated the layer . Adjust the layer's brightness and contrast (Image/Adjustments/Brightness & Contrast) until just the shadow areas are dark. This step will help the image to pop. Set the opacity of this layer to "Multiply"

10. Done!
The final image no longer looks so much like a 3D rendering. I sometimes skip the last four steps steps. It all depends upon the complexity of the image and the effect that I'm after.