**Arnold in Houdini General Tips & Tricks - Sanika Godbole**

*Setting Colorspace to Properly Render in both Viewport & Render*
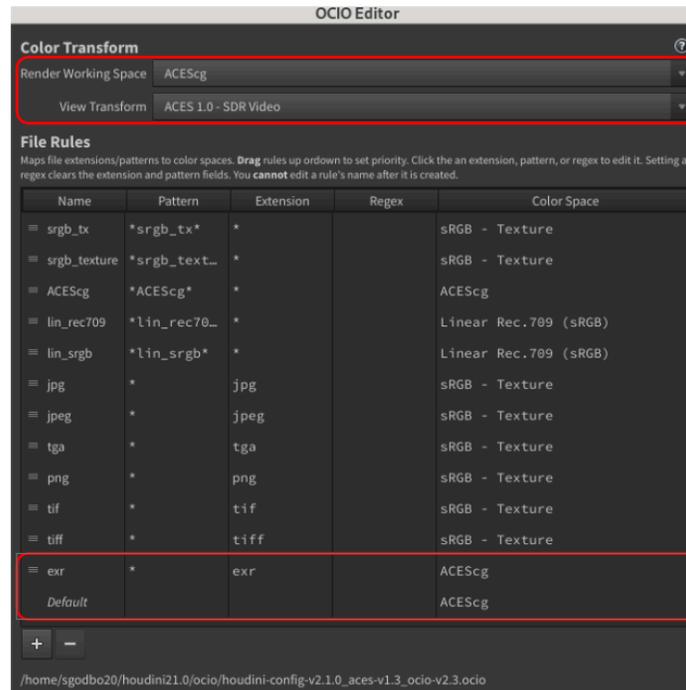*Custom Shadow Assignments*
*Subdivision on Render*
*Light Filters - Light Decay, Gobos, Atmosphere*

**COLORSPACE**

1. In Houdini, top panel, Edit → OCIO Settings:
    a. Change Render Working Space to ACEScg
    b. Change View Transform to ACES 1.0 - SDR Video
    c. Make sure the file type you are outputting your renders are set to ACEScg



2. In Solaris, click where you select what renderer to use and check the Correction Toolbar.
    a. Set to sRGB - Display & ACES 1.0 - SDR Video
    b. Make sure Enable OpenColorIO is selected



3. In Arnold Render Settings, Driver Options:
    a. Set Output Color Family to ACES and ACEScg
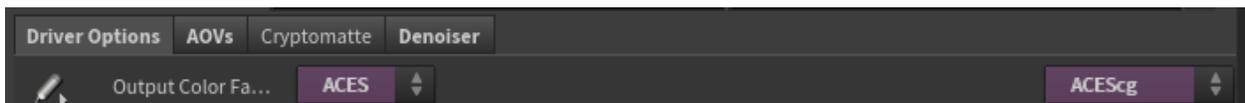


    b. Scroll all the way down to Device → Color Management, set Rendering Color to ACES and ACEScg
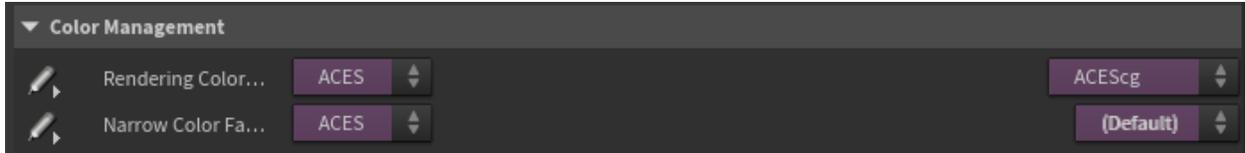
4. In Arnold Render Settings, AOVs:
    a. Set all AOVs in Renders Vars → Standard to Gaussian
5. To render locally, put down a USD Render Rop:
    a. In Arnold tab, check Direct USD Render
    b. Set Render Delegate to Arnold
6. IN NUKE:
    a. Click S to open Project Settings
    b. Make sure Color Management is set to OCIO
    c. OCIO Config = aces_1.2

**SHADOWS**
1. For whatever reason you want to control whether a geometry casts shadows, has self shadows, or receives shadows (reference image, NPR style, etc)
    a. In a Render Geometry Settings node, scroll down to Visibility:
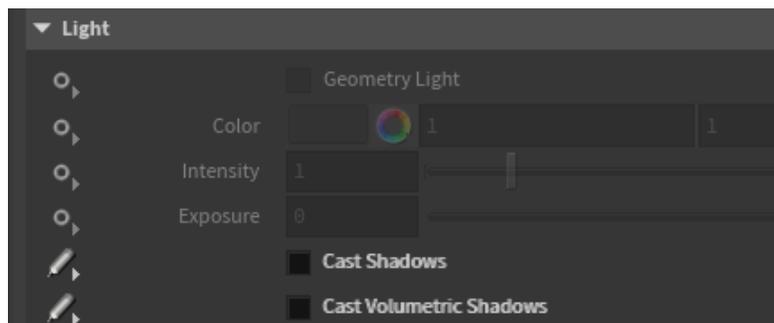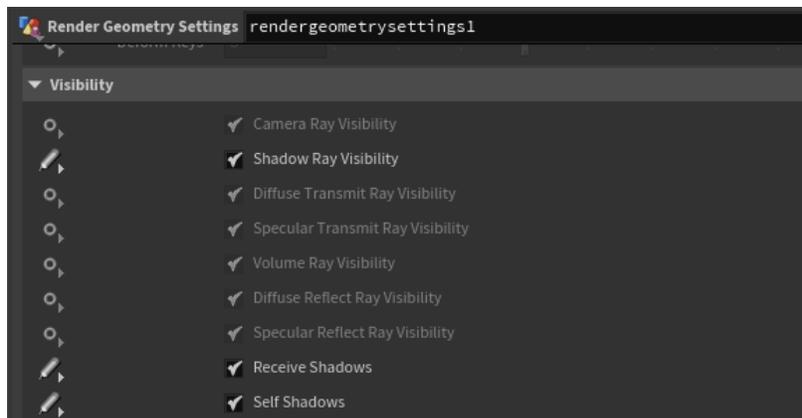


    b. Make sure Primitives is set to whatever geometry you want this node to affect
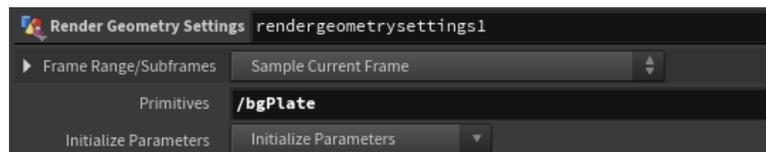


    c. There is a lot in this node, dig through it, you will probably find what you need!

**SUBDIVISION**
1. In Render Geometry Settings, in the Arnold tab:
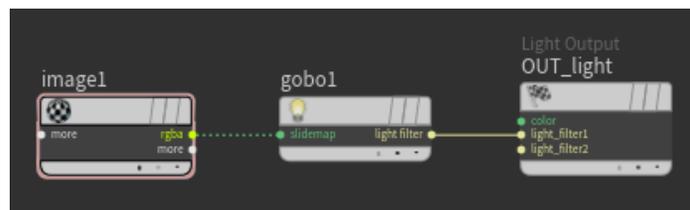   a. Set Subdivision Type to Catclark and Iterations to how many types you want to subdivide
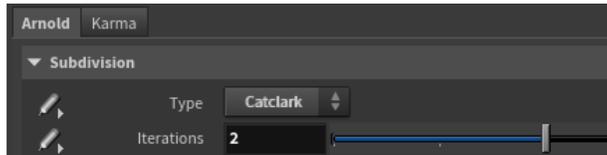


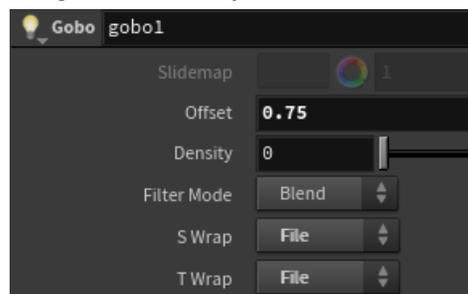2. For Cards, to turn on double sided geo, scroll down to Normals:
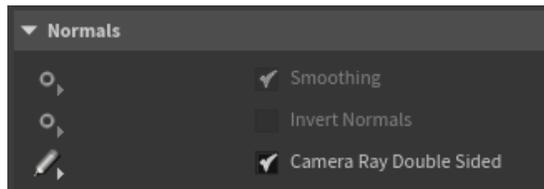


**LIGHT FILTERS**
1. In a Material Library Node, put down an Arnold Material Builder and delete the Material Output node
   a. Light Decay, Atmosphere, Barndoors
      i. Put down a Light Output node and a Light Decay node and connect them
      ii. Copy the Light Decay node
   b. BACK TO STAGE
      i. In the Light that you want it to AFFECT, go to Arnold Tab, scroll down to Shaders (IN SHADERS, NOT LIGHT FILTERS, we all see why that would be confusing…)
      ii. Paste the Light Decay node
   c. For Gobos:



      i. Image set to Utility and Raw



      ii.