Top Seven OSL Shaders for 3ds Max 2021

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Steven Schain

Designer / Trainer

Teaching 3ds since 3D Studio Dos R3.

Autodesk Certified Instructor since 1998.

Trainer – “The 3D Professor” (3ds Max, Inventor, Fusion 360, Maya, AutoCAD)

Content developer for CADLearning since 2010 (M&E / Mechanical Design)

9 Year AU veteran
Learning Objectives

• Identify 3ds Max OSL assets and third-party resources.
• Apply OSL Shaders to objects in 3ds Max 2021.
• Customize OSL shaders to create photorealistic materials.
• Identify 7 useful OSL shaders.
Introducing OSL
What is OSL?

• Open Shading Language
• Sony Pictures Imageworks
• Open Source
OSL Basics

- High level language
- Simpler to program
- Works with Arnold 5.0 & newer
OSL Shader Resources

**GitHub**
- [imageworks/OpenShadingLanguage](https://github.com/imageworks/OpenShadingLanguage)
- [ADN-DevTech/3dsMax-OSL-Shaders](https://github.com/ADN-DevTech/3dsMax-OSL-Shaders)
- [gkmotu/OSL-Shaders](https://github.com/gkmotu/OSL-Shaders)

**Facebook**
- [OSL Shaders group](https://www.facebook.com/groups/OSLShaders/)

**3ds Max OSL**
- Mads Drøschler - [http://www.masd.dk/](http://www.masd.dk/)

**Zap Andersson**
Learning OSL

- Youtube Learning Channel
- ZAP Andersson OSL Lessons
- Autodesk Area
Using OSL Shaders

- OSL Map
- Direct Shader Instance
- Editable in Material Editor
- Render with Arnold
- Accurate Viewport Rendering
My Top 7 OSL Shaders
Curves Shaders

- Color Gradient
- Color Correction
- Float
Curve (Color Gradient)
Curves (Color Correction)
Curves (Float)
Bitmap Random Tiling

- Randomize image textures
- Create unique textures
- Vary color, size and other parameters
Random Bitmap Tiling
HDRI Shaders

- HDRI Environment
- HDRI Lights
HDRI Environment
HDRI Lights
Time (Seconds)

- Read current time from timeline
- Set a time offset
Time (Seconds)
UberNoise

- Multiple noise types
Composite

• Layer two images using RGB and Alpha
Composite
UberBitmap

- Uses OpenImageIO Library
- Monolithic bitmap shader
- Output RGB, Alpha, Luminance & Average
Thank you for your time.

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