Introduction

Thank you for purchasing the HoloLens Shader Pack. You can now apply optimized shaders to your Spatial Mapping or spice up your models with one of the Surface Shaders that are included in the package.

HoloToolkit dependency

The shaders and materials in this package can be used without the HoloToolkit as shown in the demo scenes. However there are a number of scripts that provide helper functionality to use these shaders with the HoloToolkit. These scripts depend on classes in the HoloToolkit and will generate errors if those classes are not available in your project.

Using without HoloToolkit

To use this package without HoloToolkit omit the following scripts in this package.

Assets/Scripts/GazeAnimator
Assets/Scripts/GazeTransitionAnimator
Assets/Scripts/SpatialMappingCalcNormals
Assets/Scripts/SpatialMappingMaterialController
Assets/Scripts/TapTransitionAnimator

Using with HoloToolkit

Microsoft's HoloToolkit is not included in this package and can be downloaded as unitypackage from GitHub.

HoloToolkit download location

https://github.com/Microsoft/HoloToolkit-Unity/releases

1. To use shaders in this package on the geometry that is generated by the SpatialMapping make sure you add the SpatialMappingCalcNormals script to the scene. Either in an empty gameobject or on the SpatialMapping prefab that you imported from the HoloToolkit.
2. You can use one of the predefined materials and set them as the SurfaceMaterial on the SpatialMappingManager component. Or you can create a new material that uses one of the shaders under the shader folder *HoloLens Shader Pack*.
3. If *Pulse* is enabled in the used SpatialMapping material you can choose to animate the pulse based on gaze by adding a GazeTransitionAnimator script to your scene. This will automatically generate animated pulses from the location that you are looking at.
   If you want to animate a pulse by tapping, add the TapTransitionAnimator script to the SpatialMapping prefabe that you imported from the HoloToolkit.
4. The SpatialMappingMaterialController is a script that you can use specify and trigger material changes on the SpatialMapping.
   A common use is to use a speech command to trigger the SelectNextMaterial method of this script.
5. The GazeAnimator is a small script that copies the gaze hitpoint location to the specified material so gaze can be visualized in the shader instead of using a separate cursor object. The *Fragments* material is a material that makes use of this feature.

Support or feature requests

For help or feature requests please contact Roland Smeenk

roland.smeenk@gmail.com
http://www.smeenk.com
https://twitter.com/rolandsmeenk
https://www.youtube.com/user/RolandSmeenkNL