**What is claimed is :** ~~CLAIMS~~

1. A computer-implemented method for displaying shader table information used in ray-tracing an image, comprising:

intercepting, from a graphics processing unit (GPU) or a graphics driver, a buffer that specifies shader table information including one or more shader records of shaders to use in generating the image using raytracing;

determining, by a computing device and based at least in part on an identifier of the one or more shader records, a layout of parameters within the buffer for one or more shaders corresponding to the one or more shader records;

interpreting, by the computing device and based at least in part on the layout of parameters, additional data in the buffer to determine one or more parameters corresponding to the one or more shader records;

detecting at least one of an invalid memory location in the one or more parameters or, based on the layout, a null root signature associated with the one or more shader records; and

displaying, via an application executing on the computing device, an indication of the one or more parameters on an interface and an indicator of at least one of the invalid memory location or the null root signature.

2. The computer-implemented method of claim 1, further comprising intercepting, from the GPU or the graphics driver, a prior buffer that specifies a root signature and the layout, wherein determining the layout comprises:

associating the identifier of the one or more shader records with the root signature; and

identifying, in the prior buffer, the layout that corresponds to the root signature.

3. The computer-implemented method of claim 2, wherein associating the identifier of the one or more shader records with the root signature comprises identifying the root signature from the buffer.

4. The computer-implemented method of claim 1, further comprising:

intercepting, from the GPU or the graphics driver, a prior buffer that specifies a stride between shader records in the shader table;

identifying a second shader record based on a location of the stride from the one or more shader records;

determining, based at least in part on a second identifier of the second shader record of the one or more shader records detected in the buffer, a second layout of the second shader

record;

interpreting, based at least in part on the second layout, additional second data in the buffer to determine one or more second parameters corresponding to the second shader record; and

displaying, via the application executing on the computing device, a second indication of the one or more second parameters on the interface.

5. The computer-implemented method of claim 1, wherein the one or more parameters include at least one of a root constant, a root descriptor, or a root descriptor handle.

6. The computer-implemented method of claim 1, wherein displaying the indication of the one or more parameters comprises displaying a link to a root signature associated with the one or more shader records, wherein the link is associated with displaying additional parameters regarding the root signature.

7. The computer-implemented method of claim 1, wherein displaying the indication of the one or more parameters comprises displaying a link to an offset of bytes in the buffer associated with the one or more shader records, wherein the link is associated with displaying bytes associated with the one or more shader records.

8. A computing device for displaying shader table information used in raytracing an image, comprising:

a memory storing one or more parameters or instructions for executing an operating system and one or more applications including a diagnostic application; and

at least one processor coupled to the memory, wherein the at least one processor is configured to:

intercept, from a graphics processing unit (GPU) or a graphics driver, a buffer that specifies information including one or more shader records of shaders to use in generating the image using raytracing;

determine, based at least in part on an identifier of the one or more shader records, a layout of parameters within the buffer for one or more shaders corresponding to the one or more shader records;

interpret, based at least in part on the layout of parameters, additional data in the buffer to determine one or more parameters corresponding to the one or more shader records; and

display, via the diagnostic application, an indication of the one or more parameters on an interface,

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~~9. The computing device of claim 8, wherein the at least one processor is further configured to intercept, from the GPU or the graphics driver, a prior buffer that specifies a root signature and the layout,~~ wherein the at least one processor is further configured to intercept, from the GPU or the graphics driver, a prior buffer that specifies a root signature and the layout, wherein the at least one processor is configured to determine the layout at least in part by:

associating the identifier of the one or more shader records with the root signature; and

identifying, in the prior buffer, the layout that corresponds to the root signature.

9.~~10.~~ The computing device of claim 8~~9~~, wherein the at least one processor is configured to associate the identifier of the one or more shader records with the root signature at least in part by identifying the root signature from the buffer.

10.~~11.~~ The computing device of claim 8, wherein the at least one processor is further configured to:

intercept, from the GPU or the graphics driver, another prior buffer that specifies a stride between shader records in the shader table;

identify a second shader record based on a location of the stride from the one or more shader records;

determine, based at least in part on a second identifier of the second shader record of the one or more shader records detected in the buffer, a second layout of the second shader record;

interpret, based at least in part on the second layout, additional second data in the buffer to determine one or more second parameters corresponding to the second shader record; and

display, via the diagnostic application, a second indication of the one or more second parameters on the interface.

11.~~12.~~ The computing device of claim 8, wherein the at least one processor is configured to detect an invalid memory location in the one or more parameters, wherein the at least one processor is configured to display the indication of the one or more parameters as an indicator associated with the invalid memory location.

12.~~13.~~ The computing device of claim 8, wherein the at least one processor is configured to detect, based on the layout, a null root signature associated with the one or more shader records, wherein the at least one processor is configured to display the indication of the one or more parameters as an indicator of the null root signature.

13.~~14.~~ The computing device of claim 8, wherein the one or more parameters include at least one of a root constant, a root descriptor, or a root descriptor handle.

~~15. A computer-readable medium, comprising code executable by one or more processors for performing the computer-implemented methods in one or more of claims 1-7.~~

14. The computing device of claim 8, wherein the at least one processor is configured to display the indication of the one or more parameters as a link to another root signature associated with the one or more shader records, wherein the link is associated with displaying additional parameters regarding the another root signature.

15. The computing device of claim 8, wherein the at least one processor is configured to display the indication of the one or more parameters as a link to an offset of bytes in the buffer associated with the one or more shader records, wherein the link is associated with displaying bytes associated with the one or more shader records.

16. A non-transitory computer-readable medium, comprising code executable by one or more processors for displaying shader table information used in raytracing an image, the code comprising code for :

intercepting from a graphics processing unit (GPU) or a graphics driver, a buffer that specifies information including one or more shader records of shaders to use in generating the image using raytracing;

determining, based at least in part on an identifier of the one or more shader records, a layout of parameters within the buffer for one or more shaders corresponding to the one or more shader records;

interpreting, based at least in part on the layout of parameters, additional data in the buffer to determine one or more parameters corresponding to the one or more shader records; and

displaying, via an application, an indication of the one or more parameters on an interface,

wherein the code for displaying displays the indication of the one or more parameters as a link to a root signature associated with the one or more shader records, wherein the link is associated with displaying additional parameters regarding the root signature.

17. The non-transitory computer-readable medium of claim 16, further comprising code for intercepting, from the GPU or the graphics driver, a prior buffer that specifies another root signature and the layout, wherein the code for determining the layout :

associates the identifier of the one or more shader records with the another root signature; and

identifies, in the prior buffer, the layout that corresponds to the another root signature.

18. The non-transitory computer-readable medium of claim 16, further comprising code for detecting an invalid memory location in the one or more parameters, wherein the code for displaying displays the indication of the one or more parameters as an indicator associated with the invalid memory location.

19. The non-transitory computer-readable medium of claim 16, further comprising code for detecting, based on the layout, a null root signature associated with the one or more shader records, wherein the code for displaying displays the indication of the one or more parameters as an indicator of the null root signature.