CLAIMS:

1. A device to render two-dimensional (2D) imagery from three-dimensional (3D) model data comprising:

a processor circuit; and

a memory communicatively coupled to the processor circuit, the memory unit to store a control routine application operative on the processor circuit, the control routine application comprising:

a shading pixel definition component to determine one of a boundary and an area covered by a plurality of shading pixels based on at least one characteristic of at least one of a plurality of visible primitives,

a clipping component to:

determine a grid of the plurality of shading pixels for shading at least a portion of the plurality of visible primitives of a 2D screen image derived from a 3D model, and

clip a first visible primitive of the 2D screen image within a first area of the screen image covered by one of the plurality of shading pixels to form a first polygon representing an intersection of the first area and the first visible primitive,

a first interpolation component to interpolate at least one attribute of vertices of the first visible primitive to each vertex of the first polygon,

a second interpolation component to interpolate color values of the vertices of the first polygon to a point within a second area covered by a screen pixel of the screen image, the second area smaller than the first area and at least partly coinciding with the first area; and

a shading component to derive the color values of the vertices of the first polygon from the at least one attribute interpolated to the vertices of the first polygon.

2. The device of claim 1, the point coinciding with a location of a sample falling within the screen pixel, the sample employed in rasterization of the first visible primitive.

3. The device of claim 1, the clipping component to clip a second visible primitive of the 2D screen image within the first area to form a second polygon representing an intersection of the first area and the second visible primitive, the second polygon sharing at least a portion of an edge with the first polygon.

4. The device of claim 3, a vertex of the first polygon sharing a location along a boundary of the one of the plurality of shading pixels with a vertex of the second polygon.

5. The device of claim 1, comprising a display to present the screen image.

6. A computer-implemented method for rendering two-dimensional (2D) imagery from three-dimensional (3D) model data comprising:

determining one of a boundary and an area covered by a plurality of shading pixels based on at least one characteristic of at least one of a plurality of visible primitives

determining a grid of the plurality of shading pixels for shading at least a portion of the plurality of visible primitives of a 2D screen image derived from a 3D model;

clipping a first visible primitive of the 2D screen image within a first area of the screen image covered by one of the plurality of shading pixels to form a first polygon representing an intersection of the first area and the first visible primitive;

interpolating at least one attribute of vertices of the first visible primitive to each vertex of the first polygon;

interpolating color values of the vertices of the first polygon to a point within a second area covered by a screen pixel of the screen image, the second area smaller than the first area and at least partly coinciding with the first area; and

deriving the color values of the vertices of the first polygon from the at least one attribute interpolated to the vertices of the first polygon.

7. The computer-implemented method of claim 6, the point located at a center of the screen pixel, and the method comprising selecting the vertices of the first polygon from which to interpolate the at least one attribute from among vertices of a multitude of polygons formed by the clipping component based on the location of the point relative to boundaries of each polygon of the multitude of polygons, and the multitude of polygons comprising the first polygon.

8. The computer-implemented method of claim 6, the method comprising clipping a second visible primitive of the 2D screen image within the first area to form a second polygon representing an intersection of the first area and the second visible primitive, the second polygon sharing at least a portion of an edge with the first polygon.

9. The computer-implemented method of claim 8, a vertex of the first polygon sharing a location along a boundary of the one of the plurality of shading pixels with a vertex of the second polygon.

10. The computer-implemented method of claim 6, the method comprising transmitting screen image data representing the screen image to another device.

11. At least one non-transitory machine-readable storage medium comprising instructions that when executed by a computing device, cause the computing device to:

determining one of a boundary and an area covered by a plurality of shading pixels based on at least one characteristic of at least one of a plurality of visible primitives,

determining a grid of the plurality of shading pixels for shading at least a portion of the plurality of visible primitives of a 2D screen image derived from a 3D model;

clip a first visible primitive of the 2D screen image within a first area of the screen image covered by one of the plurality of shading pixels to form a first polygon representing an intersection of the first area and the first visible primitive;

interpolate at least one attribute of vertices of the first visible primitive to each vertex of the first polygon;

interpolate color values of the vertices of the first polygon to a point within a second area covered by a screen pixel of the screen image, the second area smaller than the first area and at least partly coinciding with the first area; and

derive the color values of the vertices of the first polygon from the at least one attribute interpolated to the vertices of the first polygon.

12. The at least one machine-readable storage medium of claim 11, the point coinciding with a location of a sample falling within the screen pixel, the sample employed in rasterization of the first visible primitive.

13. The at least one machine-readable storage medium of claim 11, the computing device caused to clip a second visible primitive of the 2D screen image within the first area to form a second polygon representing an intersection of the first area and the second visible primitive, the second polygon sharing at least a portion of an edge with the first polygon.

14. The at least one machine-readable storage medium of claim 13, a vertex of the first polygon sharing a location along a boundary of the one of the plurality of shading pixels with a vertex of the second polygon.

15. The at least one machine-readable storage medium of claim 11, the computing device caused to present the screen image on a display.

16. The at least one machine-readable storage medium of claim 11, the computing device caused to rasterize primitives of the 3D model to identify a multitude of visible primitives visible in the 2D screen image, the multitude of visible primitives comprising the first visible primitive.