

Cedara 3D Rendering



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3D Volume Rendering Option



Cedara Software has a variety of individual components which can be quickly integrated into your solution to provide advanced functionality. For organizations interested in incorporating 3D rendering into their application(s), Cedara created one of the first commercially available 3D Workstations (Allegro) in the late 1980s. While yesterday's solutions required time intensive pre-processing, today's technology allows 3D imaging to be performed quickly and efficiently on off-the-shelf hardware.

Point and Click Segmentation rapidly identifies structures on multiple modalities

Cedara's 3D technology has been incorporated into a wide array of products throughout the medical imaging industry and has been used for a variety of different applications. In many of Cedara's workstations, 3D rendering is also available as an optional feature to support advanced visualization and diagnostic capability. Cedara's offerings for 3D combine point and click segmentation with an emphasis on performance and image manipulation.



Point and Click Segmentation

- Semi-Automatic and preset volume segmentation reduces user interaction while providing efficient volume rendered images.
- Easily add tissues and apply different color tables to tissues to accentuate pathology and anatomy.

High Performance Image Manipulation

Manipulate and segment large datasets with ease using the advanced toolsets for a range of modalities.

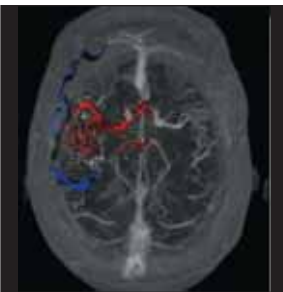
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3D rendering showing carotids highlighted relative to bone



MIP rendering of vasculature



3D rendering of MRA scan of head showing arteries and veins differentiated by color

Cross-Correlation of Images

MPR images assist in localizing pathology while correlation images enable visualization of the same point from multiple angles.

3D rendering modes:

- Multiplanar reconstruction
- Minimum intensity projection
- Shaded
- Curvilinear reconstruction
- Maximum intensity projection
- Unshaded

Opacity Modulation

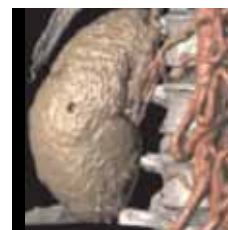
Opacity modulation removes ringing artifact in bone caused by partial volume effects and enhances the transparency.

Advanced Toolsets

- Easy to use functionality creates diagnostic quality images ensuring physicians see the whole picture.
- Scalpel and clipping tools get to the underlying structures without removing valuable tissues.
- Automatic and preset volume segmentation via ROI drawing.

Performance and Productivity

- JPEG and AVI creation allows for efficient display and transmission of rendered images.
- Interactive tumbling of the rendered volume in a real-time display ensures all angles can be seen.



Sophisticated 3D rendering for multiple modalities