Hardware

**3D Movie Projection**
The DepthQ Polarization Modulator lets digital cinema projectors display 3D films that are viewable with passive circular polarized glasses. Paired with projectors of up to 18.5K ANSI lumens, DepthQ works with screens up to 45 feet. According to Lightspeed Design, DepthQ precisely and efficiently varies the polarity of light passing through it in sync with the “triple flash” of left- and right-eye images.

The system includes a liquid-crystal modulator and its control unit, hardware that mounts the unit to the front of the projector, and an actuator to move the modulator in and out of the projection path (for switching between 2D and 3D). Synchronized output from the projector’s general-purpose I/O port is supplied to the control unit, which then conditions the signal to match the modulator’s required input.

For more information, visit www.depthq.com/cinema-modulator.html.

Software

**Holographic Printing**
Zebra Imaging’s 3D Analyst extension lets users of Esri GIS (geographic information system) software create ZScape holographic prints from data. The extension is used in industries such as exploration geology, hydrology, archeology, forestry, healthcare, mining, real estate, park services, city government, and public safety and security. Users can combine 2D and 3D data to create high-resolution 3D GIS prints with annotations, full-color models, aerial photographs, and terrain data. The prints are viewable from 360 degrees, without special eyewear. They present virtual representations of real-world conditions and can display detailed topography, cityscapes, and other 3D information.

The ZScape Exporter add-in lets users of the ArcGIS mapping system prepare, view, and submit their data for 3D printing through a Web-based service.

For more information, visit www.zebraimaging.com.

**3D Mice for the People**
According to 3Dconnexion, the 3DxWare 10 driver platform extends the use of 3D mice to any application, from MS Office to Web browsers and from media players to games. Users can assign combinations of keyboard strokes and traditional mouse or joystick movements to a 3D mouse. For example, users can tilt the controller cap to scroll a Web page, twist the cap to adjust an MP3 player’s volume, or use all six axes to pilot a helicopter in a game. Users can assign up to six axes and 31 function keys.

You can download beta versions of 3DxWare 10 for PC and Mac for free from www.3dconnexion.com/anywhere.

**Integrated Sky and Weather Effects**
Sundog Software, a developer of middleware for rendering the sky and 3D clouds, has integrated its SilverLining software development kit with Trinigy’s Vision Game Engine. Game and simulation developers can now directly access SilverLining’s toolset in vForge, the game engine’s scene editor. They specify the time, location, and weather conditions; SilverLining produces matching skies, clouds, and weather effects. It also generates lighting for outdoor scenes by simulating sunlight and moonlight scattering through the atmosphere.

For free demos and evaluation packages of SilverLining and the Vision Game Engine–SilverLining integration package, visit www.sundog-soft.com. For more information on the Vision Game Engine, visit www.trinigy.net.

**Modeling Made Easier**
Pixologic’s latest release of its Sculptris modeling software for Windows and Mac includes a dynamic tessellation system. According to Pixologic, this system lets users sculpt or paint freely on any
Tools and Products

part of a surface without worrying about the underlying geometry. The software adds triangles as needed, and only where users have applied a stroke to the surface. Users can pull, twist, and pinch the surface, adding volume as needed. They can also move their creations between Sculptris and the ZBrush sculpting and painting program with the click of a button.

For more information, visit www.pixologic.com/sculptris.

**ArtRage for iPad version 1.1.6 lets users paint digitally with virtual oil paints that smear and blend and watercolors that flow together to create soft, wet gradations.**

**Oils and Watercolors on iPads**
ArtRage for iPad version 1.1.6 lets users paint digitally with virtual oil paints that smear and blend and watercolors that flow together to create soft, wet gradations. The new version is faster and supports unlimited layers. It also provides digital-camera support for referencing and tracing images, importing images, importing to layers, and loading reference images.

Users can share painting files with the desktop version via iTunes, so they can add finishing touches or use the ArtRage 3 Studio Pro editing tools to tweak their work on a Mac or PC.

For more information, visit www.artrage.com/artrage-ipad-main.html.

**Interactive Rendering**
The V-Ray 2.0 for Maya rendering software allows interactive rendering on GPUs and CPUs. According to the Chaos Group, the new version provides faster, more robust rendering. Features include CarPaint Material, V-Ray Light Select Render Element, PText texture, 3D Motion Blur, the Sun & Sky procedural lighting system, and a physical camera for matching live footage.

For more information, visit www.chaosgroup.com/en/2/vray_maya.html.

**Light Up Your Virtual World**
Bakery Relight is interactive software for lighting, shading, and rendering. It supports the lighters’ and shaders’ iterative process—progressive and interactive refinement of properties and details—with full-resolution feedback in seconds, says the Bakery. This incremental methodology enables the matching of CG illumination with composited live-action elements.

Designed for both 2D and 3D production, Bakery Relight provides 3D high-definition previews and 3D rendering of left- and right-eye views. Multiple artists and technicians can work in parallel from one or several locations.

For more information, visit www.bakery3d.com.

**SolidWorks Meets Modo**
The Modo for SolidWorks Kit makes it easier for users of SolidWorks 3D CAD software to use Luxology’s Modo visualization software. The kit expands Modo with options for importing parts and assemblies while providing flexibility in organizing models for visualization, says Luxology.

Users can select imported data by appearance, part, body, or face and can create layers in Modo to highlight parts of a design. The kit includes 350 additional material presets that let users mimic real-world surfaces such as leather, carpet, tinted glass, and mesh grills, or mimic “x-ray” materials that reveal the designs’ interior.

Inside Modo, users see a SolidWorks-style layout and navigation controls, along with drag-and-drop support for changing materials and selecting lighting environments. Models open in Modo with the same appearance and decal information as in SolidWorks.

For more information, visit www.luxology.com.

**Manipulating Stereoscopic Animation**
LightWave, NewTek’s software for 3D modeling, animation, visual effects, and rendering, now includes stereoscopic features that provide access to all major stereo camera rigs. Users can also dynamically correct for toe-in distortion in the animation pipeline. Additional stereo enhancements include interactive Open GL off-axis adjustment of the right and left camera planes, click-and-drag convergence point adjustment in the viewport, and the ability to disable the anaglyph representation of the stereo camera in OpenGL.

Users can dynamically animate interocular and convergence points over time to track stereo changes in a shot.

Users can adjust lights, textures, and volumetrics within the viewport. They can also use the Viewport Preview Renderer to view updates, deliver environmental walkthroughs, and perform virtual location scouts. In addition, they can include or exclude models, morphs, animations, cameras, and lights upon export.

For more information, visit www.newtek.com/lightwave.