Software

Artificial Intelligence Animation
Massive 3.5 is an AI-driven animation system upgrade to Massive 3.0, which is used by professionals in animation, visual effects, and design visualization. According to the Massive Software, Massive 3.5 lets artists create and direct anything from humanoids to birds, animals, and cars, delivering realistic and emotive virtual performances. The upgrade includes these features:

- **Agent fields.** This feature handles local interactions between several agents for such things as collision avoidance, pedestrian visualization, and flocking. Agents are 3D characters that use sight, sound, and touch to interpret and react autonomously to the world around them. Users can define an area, or field, around an agent in which another agent’s proximity, orientation, velocity, direction, and color can be assessed. A new Viewpoint option lets users visualize agent fields in 3D from within the agent fields editor.

- **Extended FBX support.** Massive 3.0 provided the facility to import skeletons and motion from a wide range of animation applications via the industry-standard FBX file format. Massive 3.5 extends this to cameras, lights, geometry, and skeleton and motion export, providing facilities for integration with other applications such as SoftImage XSI, Autodesk 3ds Max, Cinema4D, and MotionBuilder.

- **Extended Python support.** Because studios are increasingly implementing integration of 3D applications using Python scripts, Massive 3.5 includes increased support for Python to make it easier to integrate Massive into custom studio production pipelines. Python scripting lets users perform action management, and the upgrade adds more functions for automating motion importing.

- **Maya particle file support.** Using Maya particle files, users can import a Massive simulation into a Maya scene as simple particles for scene integration, lighting reference, and real-time playback.

- **Improved dynamic hair and fur support.** Massive 3.5 provides a hair-shape constraint with which users can restrict hair to a user-defined shape or hairstyle. With the Mental Ray hair shader, users can create high-quality hair and fur renderings without writing custom shaders, says the company.

Massive 3.5 is available for Windows and Linux. The out-of-the-box Massive Jet 3.5 costs $5,999. For customization and the ability to create and edit agents, Massive Prime 3.5 is available at $17,999.

For more information, visit www.massivesoftware.com/products.

Enlarge Craft Patterns
Patrick Roberts Software’s Rapid Resizer v. 2.6 is a Windows application for enlarging or reducing the size of patterns, sketches, and line drawings. If the resulting pattern is larger than one printed page, the software creates an image that precisely tiles the pattern across multiple pages. According to the company, Rapid Resizer dramatically cuts the time it takes to resize patterns used by stained glass artisans, woodworking enthusiasts, quilters, doll clothing makers, painters, and sign and banner makers.

Unlike photocopiers or projectors, Rapid Resizer enlarges patterns to the exact size required. Users can enlarge a line drawing’s size without changing the lines’ thickness. The overall pattern might quadruple in size, but each line’s width will remain the same as it was in the original pattern.

Rapid Resizer can use patterns from a scanner or from the Internet. The Rapid Resizer Web site has pointers to online libraries of free patterns. Users
can just copy the image, paste it directly into the software, and resize it to meet their needs.

With one click, users can color each section of a pattern with a solid color or with images of glass or wood. The program can number each pattern piece on the basis of how it has been colored. It can also estimate how much of each type of glass, wood, or other material will be needed to complete the project.

Rapid Resizer v. 2.6 runs on Windows 98, Me, 2000, XP, and Vista. It costs $39.95. A trial version is available at the company’s Web site.

For more information, visit www.rapidresizer.com.

3D Animation Tool
Bunkspeed’s HyperMove animation tool uses raytracing processing to simplify 3D animation by integrating a full physics engine with Bunkspeed’s visualization. As in Bunkspeed’s HyperShot application, HyperMove provides users a palette of photo-realistic materials and accurate, real-time visuals.

According to the company, HyperMove’s automation lets novice users bring natural-looking motion and realism to a 3D scene. It integrates with the HyperShot renderer, where users can set global lighting effects and assign true-to-life materials to a 3D scene. After applying colors, decals, and texture maps to their 3D objects, users set a few simple animation parameters and hit “render” to create a movie.

With HyperMove’s visual composition tools, users can see 3D animation paths and control camera positions and change them interactively. Animators can direct cinematic shots by moving objects and cameras independently. Pans and zooms of multiple cameras are controlled on separate timelines.

Users can edit camera direction on the fly while the animation is playing. A fast preview lets users review animations in real time, with near ray-trace quality, before committing to a final cut. Once a composition is finished, HyperMove generates film-quality animation, says Bunkspeed.

HyperMove accepts models from 3D CAD modelers such as Rhinoceros, SolidWorks, Google SketchUp, and Pro/Engineer, and exports to various industry-standard movie formats.

For more information, visit www.bunkspeed.com/hypermove.

Advanced Graphics Standard
Nvidia announced beta drivers for OpenGL 3.0, the cross-platform, 3D graphics standard. The drivers implement the OpenGL 3.0 API and the GLSL 1.30 shading language for Windows XP and Windows Vista on selected GeForce and Quadro boards. Nvidia released production drivers for OpenGL 3.0 as a part of its regular driver development program.

The OpenGL specification provides software developers a broad set of programmable 3D and 2D rendering, visualization, and hardware acceleration functions, letting a program run on a variety of hardware platforms. An open, vendor-neutral standard, OpenGL is available on major computer platforms, including Windows, Linux, and Mac OS.

OpenGL is controlled by the Khronos Group, and the 3.0 version introduces several features to increase the functionality, flexibility, and performance of the open, cross-platform standard for 3D graphics acceleration. The new functionality includes vertex array objects, enhanced vertex buffer objects, 32-bit floating-point textures, render and depth buffers, new texture compression schemes, RGB frame buffers, and an upgraded shading language.

For more information, visit www.nvidia.com.

Color for Runway Design
OptiTex has added Color Manager to its 3D Runway Designer software, a virtual try-on system that includes cloth simulation and 3D parametric mannequins. According to the company, this will give designers a higher degree of color control over their collections. Color Manager helps designers select a color scheme for individual garments and full collections and provide the scheme to everyone involved in the design process.

Color Manager has three main components. The first is Color Pickers and Color Spaces, which supports RGB, HSV (hue, saturation, value/brightness), CMYK, and hexadecimal. The second is Harmonious Color Schemes, for work in monochromatic colors. Finally, Color Banks lets designers create, edit, and store color schemes in color banks, facilitating collaboration among users and communication with other graphics software.

Designers can choose and change colors in real time and view the results immediately. Previously, with any such software, designers could neither see the colors and how they matched, nor convey them to others accurately, says OptiTex.

For more information, visit www.optitex.com.

Hardware

DreamColor Technology Expands
Designed for graphic-intensive applications, HP’s EliteBook 8730w Mobile Workstation features...
a 17-inch diagonal HP DreamColor Display. According to the company, this display offers more than 16 million colors, significantly more than the 260,000 available on traditional notebook PCs. The workstation has 8 Gbytes of memory and Nvidia Quadro FX cards with up to 1 Gbyte of dedicated video memory.

The company also introduced the HP EliteBook 8530w Mobile Workstation and the HP EliteBook 8530p Notebook PC. These systems include a 15.4-inch diagonal display and 8 Gbytes of memory.

The EliteBook 8730w costs $1,699, and the EliteBook 8530 series starts at $1,499.

For more information, visit www.hp.com.

Mounting Multiple Screens

With Atdec’s Visidec Freestanding Range mount system, users can integrate two or four screens into one mount. Designed to maximize desk space, the mount reduces clutter. It comes in three options: double horizontal, double vertical, and quad.

With the double-horizontal and double-vertical setups, two screens can take advantage of the Windows and Macintosh extended-desktop modes for custom applications. This setup is useful for users who constantly use or view more than one application, where using only one screen is too restrictive.

Atdec says that users who perform data-intensive tasks will benefit from the quad option of mounting four screens, which effectively quadruples the screen workspace.

The Visidec Freestanding Range has a 42 × 30 cm footprint. The mounts can be moved around a desk without being fixed to one location. Displays can be rotated either in portrait or landscape mode and can be tilted up or down to 40 degrees to suit the desired visual view. The mounts can accommodate screen sizes up to 24 inches.

For more information, visit www.atdec.com.

Accelerate Your Graphics

AMD announced the ATI FirePro V5700 and V3700 graphic accelerators.

The V5700 is designed for CAD and digital-content-creation professionals. According to AMD, V5700 users will see increased performance for shader-intensive applications, as much as two times more than with the previous generation. The V5700 features 512 Mbytes of frame-buffer memory and dual-link DVI (Digital Visual Interface) and display port connections, and its 30-bit display engine produces more than 1 billion colors. Unified Video Decoder 2.0 provides full Blu-ray feature support, including dual stream and picture-in-picture capabilities, and handles the decoding of various formats in the GPU, which frees the CPU to handle other tasks. It costs $599.

The V3700 provides 3D performance for CAD professionals who are migrating from 2D. It features 256 Mbytes of frame-buffer memory, two dual-link DVI connectors, and VGA-mode support on all display outlets. It costs $99.

For more information, visit www.amd.com.

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