Hardware

Flexible Displays
NanoLumens offers a lightweight, flexible display technology (see Figure 1). The display can be rolled up for transportation, weighs about 40 kg, is one-inch thick, and is energy efficient, according to the company.

The display operates at between 500 and 1,000 nits (a unit of luminance equivalent to one candela per square meter). So, it’s suited to shopwindow applications in which daylight would make some other technologies redundant, says NanoLumens.

Richard Cope, NanoLumens CEO, says in a press release that the screen, which can be used to wrap columns or follow the contours of a bend, is “as thin as a candy bar, uses less energy than a coffeemaker, and can be hung from the ceiling like a work of art.”

NanoLumens president John Wilson says the screen can be built in practically any shape or size. He adds that NanoLumens has provided early quotes for many custom configurations, including one at 16 × 60 ft.

For more information, visit www.nanolumens.com.

A 3D Squeezable Input Device
Suma is a squeezable mouse-like input device that gives 3D control to users. (Suma is short for Satsuma, a citrus fruit.) Inside Suma’s pliant foam are light actuators surrounding a sensor core. When the user squeezes Suma, the actuators detect pressure and movement changes. Software inside Suma processes those signals and sends them to a software program that can accommodate the device.

Suma differs from a Nintendo Wii Remote, for example, in that it lets users not only move objects but also manipulate their shape. This has the potential for a new range of applications, according to Duncan Smith, head of consumer product development for Cambridge Consultants, which is developing several versions of Suma.

For more information, visit www.cambridgeconsultants.com.

Software

Extend Creative Possibilities
The Carrara 8 and Carrara 8 Pro toolsets are an all-in-one 3D solution that provides improved animation tools, enhanced lighting, new vegetation tools, and optimized rendering, according to DAZ 3D.

Artists using Carrara 8 Pro gain access to 64-bit compatibility for Mac and Windows, and the Bullet Physics Library. This open-source physics toolkit lets artists use rigid- and soft-body dynamics. Combined with speed improvements achieved from support for multithreading and 64-bit hardware, Carrara 8 Pro improves productivity, says the company.

Also, updated export capabilities let game developers transfer custom figures, environments, or animations directly into the Unity game engine via the FBX file format.

For more information, visit www.daz3d.com.

Simulation Image Processor
Northstar nBox is a simulation display processor, evolved from 3D Perception’s CompactUTM. According to the company, Northstar nBox is a plug-and-play, zero-frame-latency controller that scales, warps, blends, and color corrects content, outputs to multiple projectors, and seamlessly displays imagery across all screen shapes. Northstar nBox reduces the requirement for precise mechanical alignment, thus letting users set up a projection system more quickly, says 3D Perception.

Other features include nonlinear image warping, automatic image alignment, automatic color alignment, direct projector control, and redundant power supplies.

For more information, visit www.3d-perception.com.