

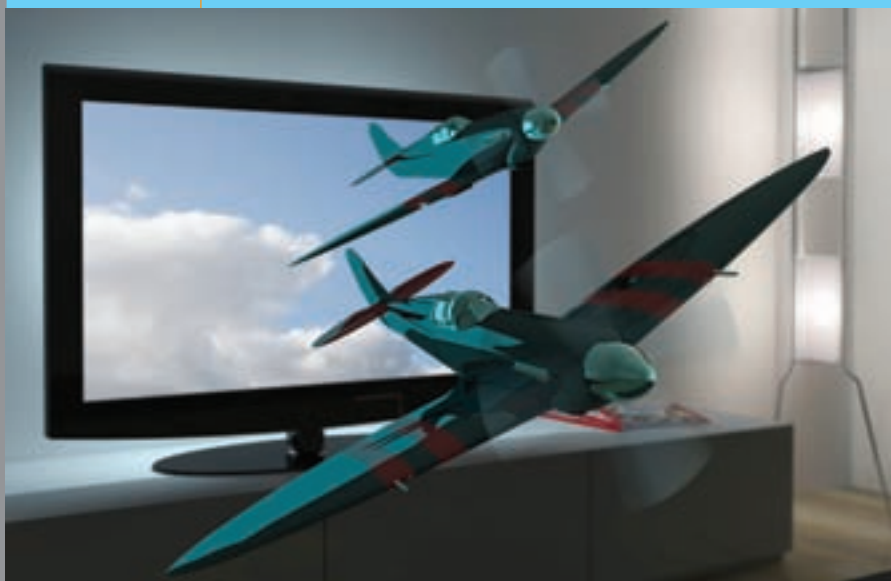
# TECHNOLOGY

## Trendsetting

By Sandra Carr

WHEN IT COMES TO THE LATEST 3-D TECHNOLOGY, ORLANDO IS AT THE FOREFRONT OF INNOVATION.

➤➤ From video games and simulators, to films and television, three-dimensional (3-D) technology is fast becoming a modern staple.



"It's here to stay," says Alana Parker, business development director for **Computerized Training Systems, LLC (C-T-S)**, "though some people still believe it's a fad."

C-T-S ([www.C-T-S.com](http://www.C-T-S.com)) has been in the computer-based training business for the past 20 years, and for the past four, it's been offering 3-D post-production and editing services to companies in a range of industries, from military to education.

"3-D technology is blooming across the board," Parker says. "Every day we learn of new techniques, software and advancements. It's growing fast."

C-T-S can provide out-of-the-screen, post-production after-effects,

as well as 2-D and 3-D conversions, for an entire project or just a portion of it. Its clients include government agencies, the U.S. Navy, film-production companies, and even museums.

"We can take anything from 2-D and convert it into 3-D for art displays," says Parker. "Anything that makes an immersive exhibit more immersive is where we come in."

C-T-S specializes in technical training solutions that include interactive 3-D animations, as well as 3-D modeling with real-time environments, 3-D visual databases and 3-D advertising. Parker says that the recent blockbuster *Avatar* reignited interest in 3-D technology. "Now you'll see that all of

the movies coming out are going to have a 3-D form. That's the beauty of 3-D: you can always have a 2-D version, so it's a double amount of everything — double the sales and the revenue."

When it comes to 3-D technology and sales and revenue, the video-game industry is another major player. And Winter Park-based **Helios Interactive** ([www.Heliosx.com](http://www.Heliosx.com)) has positioned itself at the forefront of gaming. For the past seven years, the company has been developing cross-platform, 3-D game-engine software to build games for PCs, Macs, Web browsers, and even Facebook.

Its *GameCore* ([www.GameCore3d.com](http://www.GameCore3d.com)) engine is bringing real change to the industry, as it allows users to build their own 3-D video games online by importing 3-D content from modeling packages without any conversion process. It also updates that content automatically, without the need to re-import it.

Helios' Founder and CEO Ravé Mehta explains that the gaming market traditionally consisted of either complex engines that were very programmer-centric, or more artist-friendly ones that were extremely expensive. *GameCore* has filled the gap between the two.

"I saw the future was moving towards 3-D games on the Web," says

Mehta. "We decided to lock down this new direction, with the Web and social media as our primary focus."

There are several advantages to Web-based games, including the ability to make ongoing improvements in real time. They are also much less expensive to develop than console games, plus, the audience is much larger, with 1.2 billion PCs in use versus about 100 million game consoles.

Helios's innovative product has brought much-deserved attention to the company, as well as to Central Florida. "GameCore has helped put Orlando on the 3-D gaming-technology map," says Mehta. "There aren't a lot of game-engine companies out there. Most of them are on the West Coast. Having one here just shows that Orlando has the talent for creating 3-D technology."

On the other side of town, **Lockheed Martin** recently introduced some revolutionary new software, as well. Launched last November, *Prepar3D* ([www.prepar3d.com](http://www.prepar3d.com)), built on Microsoft ESP, provides a virtual world that trains military, academia, aviation, and other professionals in immersive experiences with realistic environments. It's compatible with PCs, Macs, laptops, and full-motion simulation systems.

"*Prepar3D* is a game-changing technology for the modeling and simulation industry," says Martile Allen, *Prepar3D* program manager. "The open nature of the software-development kit, the affordability factor, the direct availability of the software and the agility with which a customer can have a solution are leading the way in addressing our customers' toughest economic challenges."

*Prepar3D's* realistic environments include real-world roads, rivers, lakes, coastlines, and cities, and users can select the weather, moon phases and time zones. The beauty of the software is that it can be customized for a variety of applications ranging from aviation to academia, and can be tailored to train for different environments.

"The *Prepar3D* reconfigurable simulation framework is built on top of an entire, round, virtual earth and it



is able to change vehicle types in a matter of minutes," Allen explains. "So, if a trainee who learned to fly in one area of the world is going on a mission in another country, that trainee could practice in the *Prepar3D* virtual world prior to deployment."

*Prepar3D* is currently being utilized globally by several groups, including the U.S. Army and Navy, and the U.S. Air Force, which trains its C-130 crews with it.

American soldiers are some of the largest users of a development from Orlando's **VCom3D** ([www.vcom3d.com](http://www.vcom3d.com)). The company, whose motto is "author once, use anywhere," takes communication to the next level. Its *Vcommunicator* software suite includes *Vcommunicator Studio*, *Gesture Builder*, and *Vcommunicator*

expressions. The library features more than 100 characters from different cultures and age groups. *Vcommunicator Mobile's* downloadable applications help soldiers learn the language and culture of the country where they're being deployed. Current offerings include versions for Iraq, Afghanistan, Pakistan and Arabic countries in Africa.

"Say you want to accomplish your mission and you have to obtain some information and convince people to cooperate with you," says Wideman. "You have to treat them with respect and be able to understand their culture. We call that cross-cultural familiarization."

Communication is VCom3D's field of expertise, and it creates custom solutions for a variety of clients, including corporations, the Department of

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— Carol Wideman, co-founder and CEO of VCom3D

*Mobile*, a collection of downloadable applications created exclusively for military use.

"We're helping the world communicate by providing tools, services, solutions, and products that can help people be more adaptable in unfamiliar situations and with cultures in other countries and our own communities," says VCom3D co-founder and CEO, Carol Wideman.

The software suite's authoring tools work together to create 3-D characters that illustrate gestures as well as facial

Defense, military branches, and schools for the hearing impaired. Oakridge Associated Universities even commissioned VCom3D to develop medical avatars for people who interface with cancer patients.

"I think we're creating awareness of Orlando as a high-tech center, especially since we're the leaders of mobile delivery," says Wideman. "The whole world has to move towards mobile capability because that's what the new generation is using. It's easy and works for us in today's world." ❌