

Douglas Fisher

Douglas Fisher became the first photographer to purchase ARTVPS's hardware ray-tracing technology. Specialising in advertising photography, he creates 3D photorealistic images for leading automotive companies and other high-profile accounts such as Nike.

Douglas Fisher has been working in photography since the mid eighties. Doug is strong advocate of the digital aspects of photography, investing in digital retouching and most recently Doug had started to experiment with the world of 3D.

"I have used 3D background elements together with my photography for about 10 years," says Fisher. "I used software-based renderers, but found it was very complicated to get good results. When I saw what ARTVPS was doing and how HDRI (high-dynamic range imaging) technology was progressing, buying the PURE card seemed like the natural step in taking my work to the next level."

PURE is a hardware rendering card for PCs and Macs that simulates the complex physics of the real world. The renderings it produces are identical to a high-quality photograph, but with the added value of realistic 3D effects and animation not possible with photos. ARTVPS's ray-tracing technology enables images to be generated up to 35 times faster than with conventional software rendering.



While Fisher's passion is photography, he hopes to gradually increase his use of the PURE card and HDRI technology to create 3D photorealistic images of cars instead of photographing them.

The process works like this: HDRI photographs of scenery are taken with a 360-degree camera or selected from an image library. The photograph is imported into 3D animation software such as 3ds max or Maya and used as a background image. ARTVPS's RenderPipe plug-in software processes contrast information from the HDRI background to create lighting for the scene. 3D CAD models used in combination with the HDRI images and rendered with the PURE card automatically adopt the lighting, shading and reflections of the environment.

Flexibility and money savings

Using 3D models instead of photographs of actual cars brings flexibility, speed and cost savings into the image-creation

process. Fisher can incorporate CAD models of prototype cars, make color and material changes quickly, and place cars in situations that would be difficult or impossible to photograph.

"There are so many advantages to using 3D rendered images instead of photography – especially when it comes to large subjects like cars," says Fisher. "In the real world, I might be asked to shoot a car that hasn't quite got the specifications of what is needed. Using PURE I can immediately change any aspect of a car very quickly. The finish on a bumper or fender can be changed from rubber, to paint, to chrome."

With HDRI processing on the PURE card, Fisher is able to create any type of environment, instead of waiting for the perfect lighting or weather conditions on a photo shoot. He is also able to avoid costly logistical challenges.

"The logistics of shipping a car from one continent to another for a photo shoot can be very difficult, not to mention expensive," says Fisher. "It is obviously much easier and less expensive to package 3D files to send than it is to send a car, which ultimately allows me to deliver a finished ad to the client in less time and for less money."