Driving into a more realistic simulation future

Japanese company Forum8 produces the interactive 3D VR driving simulation software VR-Design Studio (formerly called UC-win/Road). It is experienced in combining its cutting-edge technology with a wide range of drive simulators for driver training, vehicle and human factors research, public consultation and more recently advanced driver assistance systems (ADAS), V2V (vehicle-to-vehicle) and V2I (vehicle-to-infrastructure) communications and autonomous vehicle testing.

The use of drive simulators, especially for driver training and research, has never been so popular and, as a result, the demand for replicating the real world, replicating the feel of a real car, and the ability to interact with your VR environment in a realistic manner, is not just desirable, but in this modern technological world, fully expected.

ℹ | Need to know

Unfortunately, lots of systems out there simply don't 'cut it' when it comes to matching these needs. All too often you will have a drive simulator with excellent 'feel', but combined with inferior software that prevents the driver from interacting with the environment or having a fully immersive experience.

Meeting the challenges
Forum8 drive simulator packages strive to meet all three of these crucial factors and more, and combined with the company's own software, VR-Design Studio, offer the user a unique driving experience.

The software's ability to allow the driver to interact with their 3D VR environment is critical, whether it be a simple driver training test setup or a more complex driver research program where multiple drivers are linked together and all driving within the same 3D space.

Of course, having the ability to link multiple drivers using Forum8's software and cluster plug-in within the same 3D space is hugely beneficial and opens up many possibilities and applications, especially in complex research and driver training projects.

Being able to record all the data from multiple drive simulator systems and compare and contrast driving behavior, performance and style from an unlimited number of driving scenarios, monitoring how the drivers interact with one another, is a huge leap forward in driver training and road safety research.

Technological progression
Another technological advance is the ability to use the Oculus Rift head-mounted display. When it is used in a driving simulator, this helps fully immerse the driver within the 3D VR road network and surrounding environment, giving them a full and unique 360° experience.

As part of the company's continuous software development philosophy, Forum8 has produced a plug-in that seamlessly links this relatively new VR hardware technology and its driving simulation software. This is just another example of what is possible with the very latest 3D VR simulation software.

It also emphasizes the determination of Forum8 to keep advancing the technology to make the driver's experience as realistic as possible, enabling researchers and driving instructors to gain the most accurate results possible from within the safety of the lab. ○

@ | Free reader inquiry service