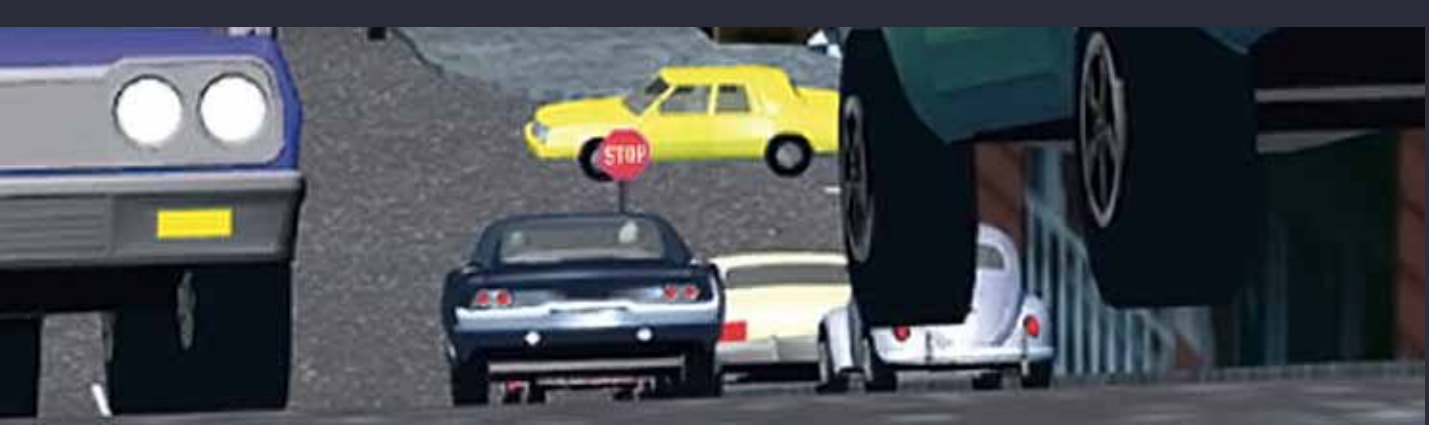


CUSTOMER SPOTLIGHT

HVE powered by Open Inventor®

Simulation Software for Highway Safety Research



Engineering Dynamics Corporation (EDC) develops and markets simulation software and related services with over 1800 customers in 28 countries around the world. Customers include motor vehicle manufacturers, government agencies, universities and private engineering consulting firms. EDC's mission is to drive the state-of-the-art in simulation technology employed by the vehicle safety industry.

With **HVE**, EDC revolutionized the vehicle safety industry by introducing a state-of-the-art simulation software for vehicle design engineers and safety researchers.

Simulation Software for Highway Safety Research



HVE is a complete 3-D simulation environment providing vehicle design engineers, safety researchers and accident reconstructionists with an extremely sophisticated (but very easy to use) tool for their routine work. Using advanced, state-of-the-art physics programs specifically designed to take advantage of the capabilities found in HVE, you can effectively perform studies to evaluate the dynamic handling behavior of existing and prototype vehicle designs, design and test the effectiveness of vehicle braking systems, study driver response to transient effects caused by tire blow-outs or irregular terrain, simulate vehicle-to-barrier and vehicle-to-vehicle crash tests, simulate real-world crashes and identify potential sources of occupant injury resulting from those same crashes.

HVE allows you to reconstruct and simulate crashes involving all types of road vehicles (passenger cars, trucks, articulated vehicles, etc.). 3-dimensional issues involving vehicle rollover, collision under-ride, irregular road surfaces, as well as system failures, such as brake defects or tire blow-out, are handled directly. The human mind has difficulty interpreting the large amounts of numerical data generated by a simulation, but easily comprehends vast amounts of visual data. Using HVE 3-D viewers, you can quickly and easily visualize the meaning of the information within HVE's numerical results.

Open Inventor is key to the success of HVE 3D visualization. Support for CAD formats like DXF allows importing actual terrain and objects into the scene. Automatic optimization of 3D rendering allows interactivity even with complex scenes. Camera control allows rendering from any viewpoint, for example in the driver's seat or following a vehicle. Advanced rendering features enhance the effectiveness of HVE visualization by allowing realistic looking vehicles and critical visual cues like skid marks on the highway surface. Accelerated off-screen rendering allows exporting high quality 3D rendered videos for presentation and web pages.

Images: EDC

About Open Inventor® by VSG

Open Inventor by VSG provides the power and functionality of OpenGL® at an object-oriented level. Its extensible architecture and advanced components, including seamless integration between visualization and GPU computation, provides a high-level platform for rapid development of the most demanding 3D graphics applications.

About EDC

EDC's goal is to provide the industry with the benefits of a single tool to improve vehicle safety and design during its entire life cycle, from the drawing board to the wrecking yard.



www.edccorp.com



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