

# IMMERSIVE, INTERACTIVE 3D SOLUTIONS VIRTUAL REALITY SERVICES



What if your entire legal team could virtually visit the scene of a catastrophic event? Or you could place the opposing party in a mediation hearing behind the wheel of the vehicle in the moments before, during and after an accident?

## Powerful Interactive Insights

ESi's Virtual Reality (VR) capabilities are grounded in proven scientific principles and have the potential to revolutionize the way we capture and communicate facts in legal and other high stakes settings. Did the headlights of the oncoming car obscure the driver's ability to see the pedestrian? Was the safety mechanism on the machine within reach? Did the heavy load unbalance the truck as it initiated the turn?

With VR, it's possible to recreate a scene with precision and clarity, increasing focus on key facts or elements, and providing a first person point-of-view that accounts for the physical characteristics, position and perspective of one or more individuals at the scene. This ensures that stakeholders have a better understanding of what happened and when, the perceptions and actions of the individuals involved, and whether certain events are plausible given the available evidence.

viewers experience data-driven, scientifically validated scenarios as they occurred in real-time. This provides critical first hand perspectives which can lead to better-informed conclusions.

### Why Do I Need Virtual Reality?

Replicating a scene to use as an investigative and demonstrative working environment can be a time-consuming and expensive endeavor. With ESi's VR solutions, details can be readily captured and shared, to capably communicate complex insights so parties can focus on the issues at hand.

- **Powerful:** VR accurately replicates the scene in an immersive, interactive environment, ensuring a level of understanding and realism no other technology can provide.
- Effective: Viewers can access a virtual scene at the same time, or at different times from different locations. Experts can provided interactive guided tours, enabling improved collaboration and a common base of understanding.
- Efficient: A virtual incident scene can be built once and reused as many times as needed to measure, analyze, and assess different points of view, or resolve disputes.

ESi's VR solutions take stakeholders beyond simply seeing and hearing about what happened, and immerses them in an interactive environment which serves as an accurate, dynamic depiction of events. This perspective can help unify a legal team's understanding of the facts, uncovering insights where spatial information, timing, and environment are critical.

#### Virtual Reality Labs in IA and GA

ESi's Virtual Reality Labs in Ames, Iowa and Norcross, Georgia serve clients domestically and internationally, and are equipped with powerful VR technologies, large viewing screens and open areas with ample room for moving around in a geometrically accurate virtual environment. Stay tuned for updates about our new VR Lab, opening in our Aurora, Illinois office later this year!

The ESi Visualization team helped pioneer the use of 3D visualization technologies in a litigation setting, and were among the first to develop 3D animations admitted as evidence in a case that went before the U.S. Supreme Court.

# **OUR AREAS OF SPECIALIZATION**

#### Scalable, Cost-Effective VR Solutions

ESi's Virtual Reality services are designed to scale with the needs and economics of a project. From simple visualizations of laser scans to complex interactive scenes, our teams create tailored, cost-effective VR solutions at the right level of rigor and detail. This nimble approach has allowed us to serve clients on projects of all sizes, types and levels of complexity, including:

- Agriculture/Farm/Mining Equipment
- · Aviation Accidents
- Building/Structural Collapse
- Commercial Trucking Accidents
- · Component/Systems Failure
- Construction Site Incidents
- Fire & Explosion Investigation
- Geologic Hazards
- Industrial Machinery

- · Lawn/Landscaping Equipment
- Manufacturing Safety
- Personal Injury Liability
- Power & Utilities Infrastructure
- Product Liability/Medical Devices
- Recreational Products
- Structural Collapse
- Train Derailments
- Vehicle Accidents







#### **Contact ESi**

Call Chuck Fox, Ph.D. at (515)-509-2916 or send an email to cafox@engsys.com and find out how to put these powerful tools to work for you.



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