











## **Media Alert:**

## ESI is Presenting its Latest Autonomous Vehicle Simulation Solutions at DSC 2017 in Stuttgart

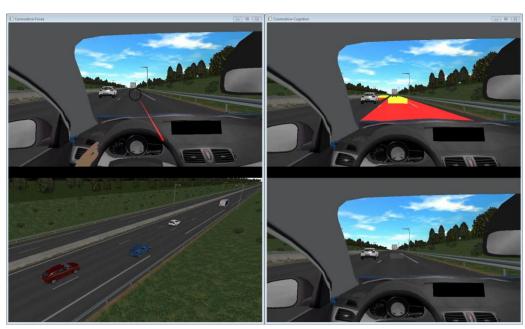
Joining Renault, the Driving Simulation Association, and FKFS

**Who?** <u>ESI Group</u> is a leading innovator in <u>Virtual Prototyping</u> software and services for manufacturing industries. Specialist in material physics, ESI has developed a unique proficiency in helping industrial manufacturers replace physical prototypes by virtual prototypes, allowing them to virtually manufacture, assemble, test and pre-certify their future products.

**What?** Organized by the Driving Simulation Association, FKFS and Renault, the <u>Driving Simulation Conference (DSC) 2017</u> is the main scientific forum in Europe in driving simulation and driving simulators. This international conference, held in Stuttgart, Germany, offers academics and companies the latest innovations in driving simulation technology, research and development.

To develop autonomous driving systems, simulation has become mandatory, from system definition to system tests, to create algorithms using virtual road environment, sensors and virtual roads users. The surrounding environment – including traffic signs, cars, and pedestrians – must be simulated to create and improve technologies for the cars of the future.

From September 6 to 8 at DSC 2017 (booth no. 4), ESI will showcase <u>IC.IDO</u>, Virtual Reality solution offering engineers an interactive and immersive 3D experience of their products or projects before they even exist. By using an Oculus Rift with two Oculus Touch Controllers, the ESI team will demonstrate a typical "occupant packaging assessment" so that visitors can virtually experience the vehicle user's visibility and reachability.





<u>Image:</u> ESI Pro-SiVIC: Visual output of the Cognitive simulation model of the driver from an ESI and IFSTTAR-LESCOT project.

Furthermore, ESI will demonstrate <a href="Pro-SiVIC">Pro-SiVIC</a>, a platform where the entire car environment, traffic signs, cars and even pedestrians can be simulated. On September 8, <a href="Jean-Charles Bornard">Jean-Charles Bornard</a>, Research Engineer at ESI Group will share his conclusions on the cognitive simulation of the car driver for Autonomous Driving systems development, in his presentation titled: "The cognitive simulation of the car driver for Autonomous Driving systems development". Indeed, ESI is developing a cognitive driver model – developed in partnership with French Laboratory Ergonomics and Cognitive Sciences applied to Transport (IFSTTAR-LESCOT). This innovation, that will be integrated in ESI Pro-SiVIC, is a step ahead in the research and development for autonomous driving systems, leveraging findings from an <a href="IFSTTAR">IFSTTAR</a> driving simulator analyzing the driver's behavior.

Even though human behavior and cognitive processes are still unsolved questions, human driver cognitive simulation will allow a better understanding of the driver's state and behavior. Driver cognition simulation will give Autonomous Vehicle engineers the ability to test their systems from main concept to HMI specification (Human Machin Interaction) or system validation, and these tests will integrate key performance indicators of human-like performance and situation awareness.

When? 6-8 September, 2017

Where? Stuttgart, Germany

For more info, please visit: <a href="https://www.esi-group.com/company/events/2017/driving-simulation-conference-2017">www.esi-group.com/company/events/2017/driving-simulation-conference-2017</a>

For more ESI news, visit: <a href="https://www.esi-group.com/press">www.esi-group.com/press</a>

For additional information, please contact:

Media Relations

Delphine Avomo Evouna
+33 1 41 73 58 46

## **About ESI Group**

ESI Group is a leading innovator in <u>Virtual Prototyping</u> software and services. Specialist in material physics, <u>ESI</u> has developed a unique proficiency in helping industrial manufacturers replace physical prototypes by virtual prototypes, allowing them to virtually manufacture, assemble, test and pre-certify their future products. Coupled with the latest technologies, Virtual Prototyping is now anchored in the wider concept of the *Product Performance Lifecycle*™, which addresses the operational performance of a product during its entire lifecycle, from launch to disposal. The creation of a *Hybrid Twin*™, leveraging simulation, physics and data analytics, enables manufacturers to deliver smarter and connected products, to predict product performance and to anticipate maintenance needs.

ESI is a French company listed in compartment B of NYSE Euronext Paris. Present in more than 40 countries, and addressing every major industrial sector, ESI Group employs about 1200 high-level specialists around the world and reported annual sales of €141 million in 2016. For more information, please visit <a href="www.esi-group.com">www.esi-group.com</a>.











