











Media Alert:

Experience Smart Virtual Prototyping at the Autonomous Vehicle Technology World Expo

ESI will showcase its Software Solutions for Highly Automated Driving (HAD) Engineering, **Interior Thermal Management & Safety**

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

What? Autonomous Vehicle Technology World Expo, event dedicated to autonomous vehicle technologies and services, will take place from June 5-7, 2018 in Stuttgart, Germany.

ESI will attend World Expo to demonstrate how a combination of advanced simulation capabilities and innovative Verification & Validation methods significantly improve the current process for automotive OEM and Tier 1 companies, to support the rapid development of safe and autonomous cars at reduced cost. This Smart Virtual Prototyping methodology also enables testing of autonomous systems via a Virtual-Human-in-the-Loop, anticipating issues linked to humanmachine interface to achieve a safe and reliable driving experience. Perception systems are key to developing Autonomous Driving systems without the need for costly physical prototypes, as is the ability to create high-fidelity synthetic data to simulate the output from multiple sensor systems for outdoor scenarios that combine vehicles, obstacles, pedestrians, weather, and road conditions.

Furthermore, when developing new vehicles, Interior Design and Seat Engineers must consider occupant thermal comfort and interior thermal management, as these are key to the efficiency of the vehicle (especially for an electric vehicle) and to the perceived comfort of the occupant. ESI's solution for Interior Engineering addresses thermal management in addition to occupant safety, opening new doors for innovative car layouts and setting the scene for tomorrow's mobility.

ESI has been working with leading automotive OEM's and their suppliers for over 40 years, delivering solutions that support the development of safe, smart and connected vehicles. At this event, ESI will be located on booth AV 5010, offering visitors and journalists live demos of its sensor design solution and Interior Solution, dedicated to autonomous vehicles.

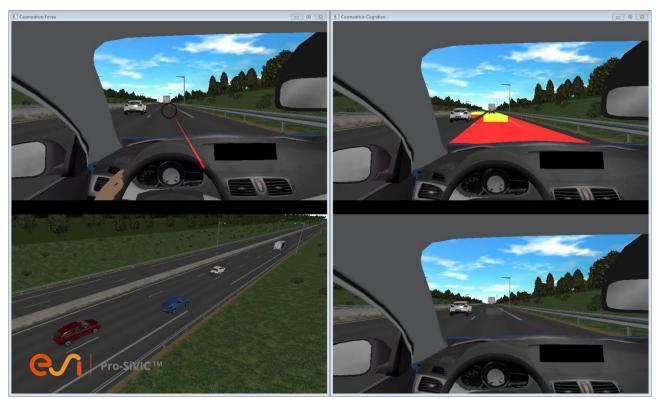
The ESI team will deliver 3 presentations during the World Expo:

"Cutting-edge simulation methods to overcome Autonomous Driving development challenges"; presented by Rodolphe Tchalekian, Pre-Sales Engineer at ESI Group, June



6 at 5pm (<u>Autonomous Vehicle Test & Development Symposium</u>; track: *Using Simulation to Advance System Design & Validation*)

- "Cognitive Simulation of the Driver for Autonomous Driving System Tests"; presented by Jean-Charles Bornard, Main Engineer for Cognitive Engineering and Human Factors at ESI Group, June 7 at 2:15pm (<u>Autonomous Vehicle Test & Development Symposium</u>; track: Best Practices Session)
- <u>"Virtual Prototyping to virtually test passenger comfort and safety for autonomous cars"</u>;
 presented by Caroline Borot, Head of Business Development for Industry Solutions at ESI Group, June 6 at 5.30pm (<u>Autonomous Vehicle Interior Design & Technology Symposium Europe</u>)



<u>Image:</u> ESI Pro-SiVIC helps solve development challenges for HAD engineering, early in the development process.

When? June 5-7, 2018

Where? Messe Stuttgart (Germany), Hall C2, Booth AV 5010

For more info, and to book a meeting with ESI at the event, please visit: http://www.esi-group.com/company/events/2018/autonomous-vehicle-technology-world-expo

For more ESI news, visit: www.esi-group.com/press

For additional information, please contact:



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 €135 million in 2017. For more information, please visit www.esi-group.com.

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