



NEWS RELEASE

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ANSYS AND BMW GROUP PARTNER TO JOINTLY CREATE THE INDUSTRY'S FIRST SIMULATION TOOL CHAIN FOR AUTONOMOUS DRIVING

New agreement drives development of autonomous driving technology for the BMW iNEXT, the next-generation autonomous vehicle

PITTSBURGH, June 10, 2019 – [ANSYS](#) (NASDAQ: ANSS) and [BMW Group](#) are creating the industry's first holistic simulation tool chain for developing autonomous vehicle (AV) technologies. The simulation tool chain will enable highly automated and autonomous driving (AD) with the first vehicle launch expected in just two years. BMW Group is leveraging ANSYS' broad pervasive engineering simulation solutions and experience to speed up the development of a safety-focused solution for the validation of AD systems.

The financial impact of AVs is tremendous, with analysts predicting that AVs will boost the global economy by \$7 trillion. But the impact on human life is even more significant with AVs having the potential to significantly reduce traffic accidents, reportedly saving more than 600,000 lives annually. Before they drive the highways in large numbers though, AVs must first support safety testing through rigorous testing in complex driving environments, including boundless road conditions and weather scenarios. This would require billions of miles of physical road tests across numerous driving conditions. Simulation greatly reduces the need for physical testing and will help bring safe AVs to the highways in a fraction of the time.

The multi-year agreement drives the development of BMW Group's Level 3 offering and Level 4-5 technology, delivering high/full automation for the highly anticipated BMW iNEXT, expected to launch in 2021. The new automated simulation tool chain will make efficient use of BMW's large amount of sensor data through intelligent data analytics and the creation of scenarios according to statistical relevance and AD system sensitivity. The scenarios will include usual driving situations and corner cases to ensure maximum test coverage. Based on these scenarios, the toolchain will perform rigorous safety assessments of the AD systems in a high-performance virtual environment. ANSYS and BMW will support its adaptability and openness regarding relevant interfaces and validation approaches to accommodate and foster safety initiatives.

ANSYS will assume exclusive rights to the simulation tool chain technology for commercialization to a wider market.

“BMW Group is a leader within the automotive industry and is revolutionizing the automotive landscape through their development of cutting-edge autonomous vehicle technologies that will drastically transform transportation as we know it. This partnership is a true game changer, positioning BMW and ANSYS as key drivers for turning this future vision into a near-term reality,” said Eric Bantegnie, vice president and general manager at ANSYS. “ANSYS simulation brings a complete virtual testing environment for AV systems to this partnership, designed to usher in a new era of fully autonomous vehicles and help address critical safety validation requirements for autonomous driving.”

About ANSYS, Inc.

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