## Our Contribution to the 16th GSVF- "Digital Twin-Generation and Variation in Reinforcement Learning"

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At the 16th Global Software Validation Forum (GSVF), our CEO, Stephan Kussmaul, presented our latest research. For those who attended GSVF, you can download the papers here <a href="https://lnkd.in/eieS7K2M">https://lnkd.in/eieS7K2M</a>. If you missed it, here's a snapshot:

Within the ASIMOV project, part of the ITEA RD&I Cluster on software innovation, (<a href="https://lnkd.in/eCAe9k3Y">https://lnkd.in/eCAe9k3Y</a>) we've explored an innovative approach to 3D scene map generation and variation within a reinforcement learning environment. This research stems from the growing demand for cost-efficient data to train, test and verify ADAS & AV algorithms.

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ADAS development relies heavily on extensive testing and requires a wide range of heterogeneous 3D scenarios, including critical ones. However, obtaining such data and finding edge cases is resource-intensive.

## Our Contribution:

Our method involves the dynamic variation of 3D scene maps through parameters created by the reinforcement learning agent (RLA). This variation and automatic re-creation of 3D scene maps for each test iteration enable us to generate substantial test data, facilitating algorithm validation effectively.

In simplifying test data creation, we are making significant strides in enhancing ADAS algorithm development and validation, ultimately bolstering road safety.