

Innovative 3D-visualization, 3D volume and surface inspection

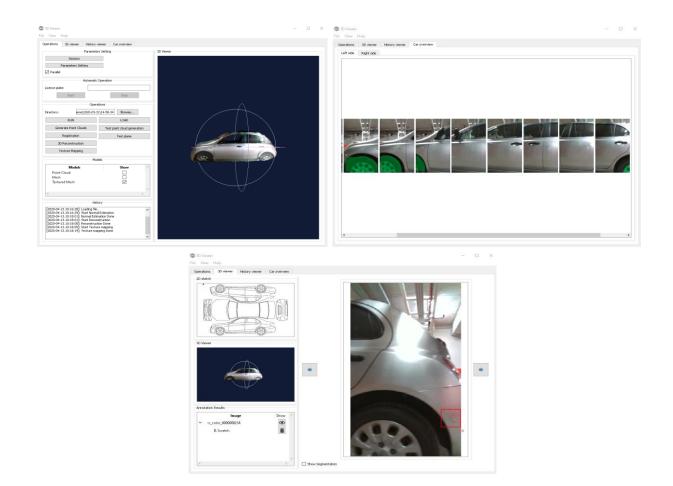
Press release | INVIVO - Development of a new inspection & visualization system for vehicles in motion

On March 6, 2020 the 3rd Plenary Meeting of INVIVO took place in Thessaloniki, Greece with the participation of all partners. The purpose of this meeting was to discuss the current status of the INVIVO project, and to demonstrate the mechanical installation and visualization capabilities of the system.

The objective of INVIVO is the development of a new inspection and visualization system of vehicles in motion based on optical 3D metrology and embedded vision to realize fleet monitoring and car rental management. The main research priorities are the development of a 3D smart sensor, the implementation of a demonstrator including intelligent lighting for scanning whole cars and advanced 3D data processing for visualization and surface inspection.



The scanning frame includes several cameras on each side to scan the car parked underneath. The operator enters the license plate of the inspected vehicle before starting the scanning process. When the 3D color model is ready the user can inspect the acquired images and, as an additional feature, manually annotate different types of defects on each image.



The next steps for the project will be dynamic illumination adaptation, automated detection of possible surface defects and the integration of signal processing techniques for 3D color data enhancement.

INVIVO PROJECT CONSORTIUM

