

Using Artificial Intelligence for road monitoring: the ViAI

Sustainable cities rely on efficient, safe and enjoyable road networks. To keep roads at this level, road authorities need to monitor the road network on regular base. To perform this task at their best, road practitioners need smart and user-friendly solutions which reduce any possible human error optimizing the managerial resources in terms of costs and time. This is the direction of the newest ViaTech's product.

ViaTech's R&D department developed an innovative technology based on Computer Vision techniques: the ViAI. With high resolution camera system as sensor, ViAI offers an automated survey system for road monitoring and inspection. ViAI captures, localizes and reports the state of road condition and road furniture with care of privacy concerns according to GDPR rules. ViAI's sensitivity makes possible the detection of features such as road defects at very early stages alerting for actions and leading to prompt actions if needed.

ViAI combined with our 3D Mobile Mapping System (ViaPPS) offers a powerful tool which integrates the feature detection and extraction (ViAI) with a detailed and accurate 3D point cloud (ViaPPS) of the examined pavement and side areas. The fusion of these solutions is a desirable candidate for a smart, reliable and user-friendly solution for monitoring, inspection, maintenance and approval of any road pavement surface at any life-stage.

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