

Reality Capture Standards for Integration into Digital Twins: Technologies, Accuracies and End-Product Applications

Mina Jahanshahi and Brad Chambers (Australia)

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SUMMARY

This presentation highlights how advanced mobile mapping technology supports asset management, safety ratings, and AI development. Utilising the Leica TRK700 Neo and integrated sensors, Veris captured 4,500 km of roadway data in just eight days, producing 550,000 high-resolution images and 30 terabytes of data. The project demonstrates the potential for scalable, high-quality data capture to enhance roadside asset analysis, road safety, and broader infrastructure applications. □□ This presentation will outline streamlined data processing techniques using multiple software instances. The workflow included generating point clouds, high-resolution imagery, and dual-pass alignments while integrating forward-facing imagery for machine learning. This project showcases advanced mobile mapping technology and demonstrates the potential for large-scale, efficient data collection to address various analytical and operational needs.

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