
3D Modeling and Visualization Based on Laserscanning

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Abstract

The paper describes an approach using the ground-based laser-scanning technique for data fusion, object modeling, and visualization. A ground-based mobile mapping system has been developed, upon which multiple sensors including CCD, DGPS and laser scanner have been integrated to provide near-continuous positions of the platform in space and simultaneously to collect spatial information in object space. The objectives of this system are for mapping road, surveying bulk of accumulation, and other related applications. Two practical applications of the system are introduced in this paper. Finally some conclusions and further research work are provided.
