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RECONSTRUCTION OF BUILDING OUTLINES IN DENSE URBAN AREAS BASED ON LIDAR DATA AND ADDRESS POINTS

M. Jarzabek-Rychard
Institute of Geodesy and Geoinformatics, Wrocław University of Environmental and Life Science, Poland

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Abstract. The paper presents a comprehensive method for automated extraction and delineation of building outlines in densely built-up areas. A novel approach to outline reconstruction is the use of geocoded building address points. They give information about building location thus highly reduce task complexity. Reconstruction process is executed on 3D point clouds acquired by airborne laser scanner. The method consists of three steps: building detection, delineation and contours refinement. The algorithm is tested against a data set that presents the old market town and its surroundings. The results are discussed and evaluated by comparison to reference cadastral data.

[Conference Paper](#) (PDF, 1898 KB)

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