

AUTOMATED EXTRACTION OF BUILDINGS FROM AERIAL LIDAR POINT CLOUD AND DIGITAL IMAGING DATASETS FOR 3D CADASTRE - PRELIMINARY RESULT

Pankaj Kumar^{1,*}, Alias Abdul Rahman², Gurcan Buyuksalih³

¹ UNIVERSITI TEKNOLOGI MALAYSIA

² UNIVERSITI TEKNOLOGI MALAYSIA

³ BIMTAS, Istanbul

* Corresponding Author pankaj203kumar@gmail.com

Many efforts have been investigated and employed to map or construct buildings and other 3D objects from point clouds data either from terrestrial or airborne laser scanning technique. Moreover, many were based on manual or semi-automatic techniques. This paper describes our recently developed approach to construct 3D buildings and other 3D objects from LiDAR point clouds automatically. In the end, these constructed objects could be utilised such as for 3D city modelling as well as for 3D cadastre purposes. We plan to demonstrate the technique by using Istanbul city datasets.

Keywords Point clouds, algorithm, 3D object reconstruction, 3D cadastre objects