

IMPLEMENTATION OF SURFACE RECONSTRUCTION USING SCATTERED POINT CLOUD WITH CRUST ALGORITHM

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ABSTRACT

Surface reconstruction means that retrieve the data by scanning an object using a device such as laser scanner and construct it using the computer to gain back the soft copy of data on that particular object. Surface reconstruction is a reverse method. It is very useful when in a particular object original data is missing without doing any backup. We develop a system for image reconstruction from scattered cloud points. Crust algorithm with umbrella Filtering will be implemented. Crust algorithm plays an important role due to its guaranteed quality of triangular mesh generation. Crust algorithm monitors the various parameters of mesh generation and evaluates the performance of the algorithm by calculating parameters. The main aim of the algorithm is to filter out left insignificant data while preserving an acceptable level of output quality.

KEYWORDS: Surface Reconstruction, Crust Algorithm, Umbrella Filtering, Point Clouds, 3D