

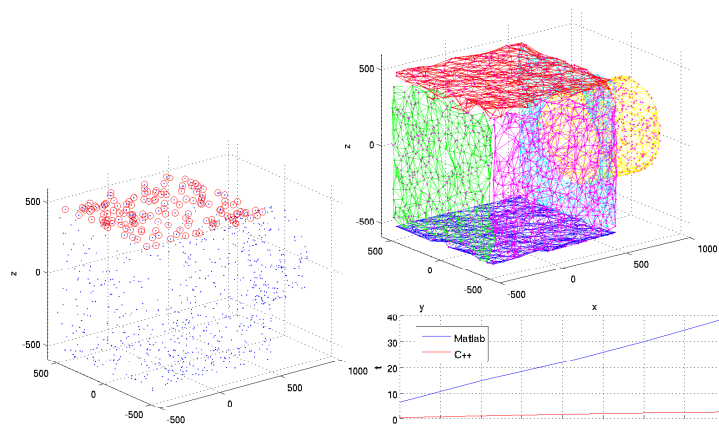
Analysis and implementation of an object-recognition

The reconstruction of objects from point clouds in order to get a representation of the environment for navigation purposes and obstacle detection is a topic of increasing interest in automation technology. It is through popular hardware like the Microsoft Kinect and increasing computing power, that it is possible to realize an object recognition easier and more efficient.

Nevertheless, it is often useful to minimize computation time with an efficient implementations, in order to use the often limited resources optimally, up to real-time capability.

This work analyzes and implements an existing MATLAB solution in C++, in terms of efficiency using the MEX interface to ensure compatibility with the existing object reconstruction.

The subsequent validation of the implementation using the existing solution shows the possibilities offered by such an implementation in terms of computing time reduction.



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