

Faculty for Informatics Prof. Dr. G. Umlauf



Konstanz, 15.03.2024

Assignment 3

"3d Computer Vision"

Deadline 04.06.2024.

Preliminary remark: Use your solution from the previous assignments.

Part 1 (Point Cloud)

Make yourself familiar with the loading and storing of a point cloud in the provided code template. Prepare your internal data structures for a subsequent implementation of a 3d-tree of the bunny-point-cloud in Part 2.

Part 2 (kd-tree)

Implement a 3d-tree for the loaded 3d-point-cloud of the bunny and visualize the first three levels of the respective 3d-tree-partition.

Part 3 (oct-tree) required only for the 6th ETCS...

Implement an oct-tree for the loaded 3d-point-cloud of the bunny and visualize the first three levels of the respective.