

Abstract

3D reconstruction is a process of regenerating 3D information of an object using its 2D images. It's been an important part of computer vision studies. Computer vision deals with automatic extraction of various kinds of information from images. The main aim of machine vision is to let machine visualize the world as we humans do and let them interact it.

Various algorithms have been discussed for reconstruction purpose. Present thesis gives an overview of some of these algorithms and then it discusses the implementation issues of one of that algorithm.

Volumetric reconstruction algorithms are getting popular due to their less complexity and the increasing storing capability of the computers. So it's a good area to explore.

This thesis focuses on how the voxel coloring algorithm behaves when operating on different number of images to reconstruct and when it has to operate on different resolution.