Fast Depth Generating Algorithm From Binocular Images

鄭芳炫, 郭子豪
Computer Science & Information Engineering
Computer Science and Informatics
fhcheng@chu.edu.tw

Abstract

This paper proposes a line segment method to estimate the depth information from a pair of rectified images. The proposed method can achieve fast and high quality stereo-matching. This method first uses a simple edge detection to find out the line segments in the reference image and then
calculates the color difference of each line segment from binocular images. The last step is to find out the minimum difference of each line segment as the corresponding points. From the experimental results, it is proved that the proposed method can fast and accurately generate the depth information
from binocular images.

Keyword：Depth information, Stereo matching, Binocular images