

CMSC 25050 Computer Vision Project Report

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Introduction

It's always amazing that living creatures have the ability to measure distance and reconstruct three-dimensional structures though the images they sense from their retina are in fact 2D. Then it brought up the question — is there a way to reconstruct back the 3D structure from a set of images? Then the topic of "Structure from Motion" (SfM) arises. It has its profound influence in nearly every field, such as geoscience where scientists can utilize SfM to reconstruct and analyze terrains, and such as archaeology where archaeologists can use SfM to reconstruct lost ancient objects with their remaining documents of images.

There are two different scenarios about real life situations

Method

Experimental Results

Discussion

Reference