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Abstract

There are several augmented reality techniques, although each one has its flaws due to the environment or other external constraints. The study of boundaries and constraints can provide to the developer more decision power while choosing the appropriate technique. This essay provides a method to, based on common parameters and situation, chose the appropriated technique.

1 Introduction

introduction test

2 Augmented Reality

3 Concepts

3.1 Camera

3.2 Camera Calibration

3.3 SLAM

3.4 Structure from Motion (SfM)

3.5 Edge Recognition

4 Method

The recognition of an object in a scene with precision can be a trick problem to be solved, and to increase the experience with some virtual artifacts calls for a high level of localization accuracy.

This paper presents an approach based a pre-known 3d representation of the scene.

The real time reconstruction of the scene are fundamental to reduce the cumulative error added to the recognition added after each frame because of interest point recognition hardness caused by light variation, textures and other issues studied in this essay. As proposed in [**?**]

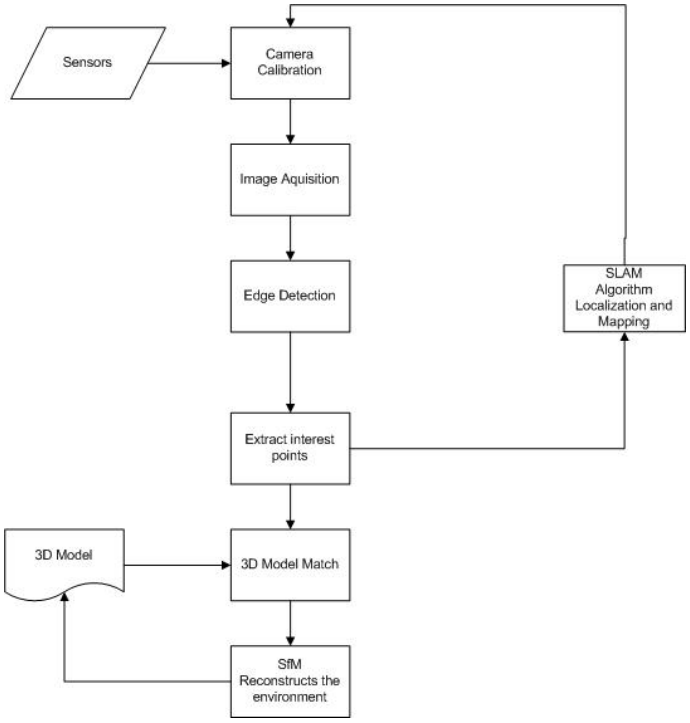

Figure 1: *Algorithm Diagram*

4.1 Camera Calibration

4.1.1 Error Reduction Approach

4.2 Image Acquisition

4.3 Edge Detection

4.4 Extract Interest Points

4.5 Model Match

4.5.1 Real Time Model Reconstruction

5 Boundaries

The recognition of interest points

5.1 Light Effect

5.2 Texture

5.3 Object Occlusion

6 Study Case

7 Conclusion