Abstract

In this paper, a new method for line segments matching for indoor reconstruction will be presented. The problem of line segment tracker is addressed, which does not require any knowledge about the motion of the camera nor the structure of the observed scene. The slopes of lines segment as feature to track are used in order to deal with the instability of the endpoint extraction. The proposed method relies solely on the geometry layout of the slope of the segment and not on photometric or color profiles and does not need any knowledge about the parameters of the camera or its rotation. The obtained results showed the feasibility of the method.

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**Index Terms**

Computer Science  
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**Keywords**

Tracking  line segment  Matching