

## 改进的 LB 算法在动态手势识别中的应用

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**摘 要:** 为了提高动态手势识别中的匹配效率, 提出一种改进的 LB 算法. 首先, 对采集手势深度信息进行实时分割, 并使用一种新的特征提取方法对手势进行描述. 然后, 引入锚定距离的概念, 并将其应用到 LB 算法当中, 同时进行分类和识别. 最后, 分别对比其他两种相关算法的执行时间, 以及改进 LB 算法的识别率. 实验结果表明, 提出的方法在不影响识别率的情况下, 对算法执行效率有了很大的提升.

**关键词:** 动态手势识别; 手势分割; 锚定距离; DTW; LB

## The Application of Improving LB Algorithm in

### Dynamic Gesture Recognition

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**Abstract:** In order to improve the matching efficiency of dynamic gesture recognition, we have put forward a modified LB algorithm. First of all, we segment the collecting depth information of gesture in real time, and use a new feature extraction method to describe gesture. After that, we introduce the concept of anchor distance, and apply it to the LB algorithm, for simultaneous classification and recognition. Finally, comparing execution time of other two kinds of algorithms respectively and recognition rate of modified LB algorithm. The experiment results show that the method proposed in this article has improved algorithm performance efficiency in the case of having no influence on recognition rate.

**Key words:** dynamic gesture recognition; gesture segmentation; anchor distance; DTW; LB

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