

基于多帧间的差的视频对象提取方法及其在DSP上的实现

吴晓岚, 王世刚, 纪腾飞, 李强

吉林大学 通信工程学院, 长春 130012

收稿日期 2007-1-2 修回日期 2007-6-22 网络版发布日期 2008-1-2 接受日期 2007-6-26

摘要 针对自动提取方法及半自动提取方法的缺点, 提出了一种在Blackfin 533 DSP (Digital Signal Processor)

芯片上实现的视频对象提取方法。该方法是利用图像多帧差累积的高阶统计量来提取出视频对象, 设计了DSP实现系统并对算法进行了测试。测试结果表明, 该算法可以满足当前多种视频图像处理实时应用需求, 具有良好的应用前景。

关键词 [通信技术](#) [数字信号处理器](#) [视频序列](#) [视频对象平面](#) [视频对象提取](#)

分类号 [TN919.8](#)

Video object extraction and its DSP realization based on multi-frame difference

Wu Xiao-lan, Wang Shi-gang, Ji Teng-fei, Li Qiang

College of Communication Engineering, Jilin University, Changchun 130012, China

Abstract With the development of computer and multimedia technology, the study of extracting of video object from video sequence is becoming a hot issue in the image processing. This paper presents a video object extraction method based on chip of Blackfin 533 DSP (Digital Signal Processor). The high order statistics of multi frame difference accumulation are used in the video object extraction. The algorithm makes full use of the DSP (Digital Signal Processor) high performance in the data processing. The experiments have testified that the algorithm can meet many application needs in the field of image processing and has good application prospects.

Key words [communication](#) [digital signal processor\(DSP\)](#) [video sequence](#) [video object plane\(VOP\)](#) [extraction of video object](#)

DOI:

通讯作者 王世刚 wangshigang@vip.sina.com

扩展功能

本文信息

▶ [Supporting info](#)

▶ [PDF\(1690KB\)](#)

▶ [\[HTML全文\]\(0KB\)](#)

▶ [参考文献](#)

服务与反馈

▶ [把本文推荐给朋友](#)

▶ [复制索引](#)

▶ [文章反馈](#)

▶ [浏览反馈信息](#)

相关信息

▶ [本刊中 包含“通信技术” 的相关文章](#)

▶ 本文作者相关文章

- [吴晓岚](#)
- [王世刚](#)
- [纪腾飞](#)
- [李强](#)