论文

基于梯度和运动估计的视频质量评价

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摘要:

数字视频质量评价在视频压缩、处理以及视频通信领域中有着十分重要的作用.本文在现有视频质量评价方法以及对人类视觉特性研究的基础上,提出了一种基于梯度和运动估计的视频质量评估方法.该方法充分考虑了视频图像的边缘特性、各帧之间的时间相关性以及画面中场景的变化对视频质量的影响等因素.实验结果表明,该方法对基于H.264编码的失真视频有更好的评价效果,与人类视觉的主观评价结果一致.

关键词: 视频质量评价 基于梯度的结构相似度 运动估计 梯度和运动估计

Video Quality Assessment Based on Gradient and Motion Estimation

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Abstract:

Digital video quality assessment plays an important role in video compression ,processing and video communications.A method of video quality assessment based on gradient and motion estimation was proposed according to the existing evaluations and human visual system.The new method takes into account the characteristics of the edge information,the temporal correlation between frames,and effects of the scenes' contents changes on the quality of the video.The experiments results show that it is coherent to the human eye's visual effects on the distortion video based on H.264.

Keywords: Video quality assessment   Gradient Based Structural Similarity(GSSIM)   Motion estimation   Gradient and Motion Estimation(GMES)

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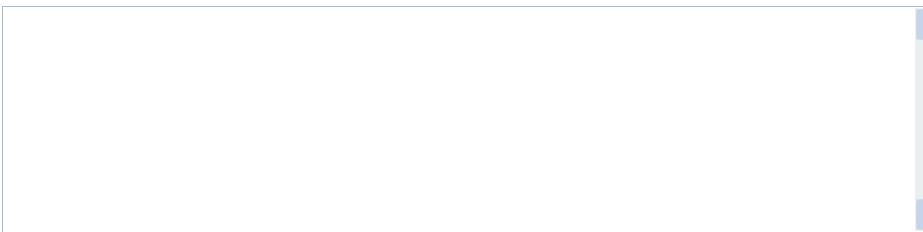**文章评论** (请注意:本站实行文责自负, 请不要发表与学术无关的内容!评论内容不代表本站观点.)

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