

## 可伸缩视频编码在移动互联网中的应用与实现

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**摘要:** 为了应对移动互联网中终端和网络的异构性, 尝试将 H.264/SVC 应用到移动视频点播服务中, 实现基于 SVC 的码流自适应播放系统. 借助 JSVM 研究并实现了不同空间、时间, 以及质量层的可伸缩视频的生成; 基于 VS 模拟了可伸缩视频在传输和播放过程中码率的动态切换; 通过分析子层码流证实了可伸缩视频具有码率跨度大及解码质量好等特点. 最终验证了 H.264/SVC 在移动互联网视频服务中所具有的优势, 以及应用的可行性.

**关键词:** 移动互联网; H.264/SVC; 码流自适应; JSVM

## The Application and Implementation of Scalable Video Coding in Mobile Internet

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**Abstract:** In order to deal with heterogeneity of the terminal and the network in the mobile Internet, the H.264/SVC is applied into the mobile video-on-demand service, and a bit stream self-adaptively broadcast system based on SVC is implemented. With the aid of JSVM, the generation of scalable video with different space, time and quality layers is implemented. On the basis of VS, the dynamic switching is simulated in bit rate of scalable video in the process of transmission and broadcast. By analyzing the sub-layer stream, we confirmed that scalable video has a large span on bit rate and the quality of decoded video is good, and tested the advantages of H.264/SVC in mobile Internet video services, and the feasibility of the application.

**Key words:** mobile Internet; H.264/SVC; streaming self-adaption; JSVM

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