

# Quality Estimation for Scalable Video Coding

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## Abstract

Video coding standards like H.263, MPEG-4, H.264/AVC and its Scalable Extension H.264/SVC have an important impact in the real digital video transmission. With the advent of these video standards the multimedia applications have also experienced a widespread growth. In this respect, scalable video coding feature provides flexible measures to cope up with different requirements as per the application and medium of transmission. This allows the users to access multimedia on a range of access networks adapting to the constraints posed in each scenario. Practically the different video content requirements can be seen in applications like video telephony, Mobile TV and HDTV. As the multimedia applications development grows, concern for video quality has also gained considerable importance over time. So, in view of this aspect it is necessary to determine the performance metrics for a reconstructed video sequences to rate the results of a video codec. The question of how different scalability types affect subjective quality has not a final solution yet. This is also content-dependent, so the properties of the video data itself should be taken into account while establishing a quality metric for estimation of video quality. In this pursuit some of the influential factors that affect the quality of the video sequence are analyzed. The maximized motion vectors that relates to the amount of motion experienced in the video content plays an important role in this scope. In order to exploit the human visual system response to the variation of frame loss, the effect of discarded frames of variable burst sizes following a regular or non regular pattern is also of interest.

## REFERENCES

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