Subjective Quality Assessment for Impaired Videos with Varying Spatial and Temporal Information

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Abstract : The new era of digital communication has brought up many challenges that network operators need to overcome. The high demand of mobile data rates require improved networks, which is a challenge for the operators in terms of maintaining the quality of experience (QoE) for their consumers. In live video transmission, there is a sheer need for live surveillance of the videos in order to maintain the quality of the network. For this purpose objective algorithms are employed to monitor the quality of the videos that are transmitted over a network. In order to test these objective algorithms, subjective quality assessment of the streamed videos is required, as the human eye is the best source of perceptual assessment. In this paper we have conducted subjective evaluation of videos with varying spatial and temporal impairments. These videos were impaired with frame freezing distortions so that the impact of frame freezing on the quality of experience could be studied. We present subjective Mean Opinion Score (MOS) for these videos that can be used for fine tuning the objective algorithms for video quality assessment.

Keywords : frame freezing, mean opinion score, objective assessment, subjective evaluation
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