

Non-Referenced Video Quality Testing and Monitoring

Abstract:

Quality of Service (QoS) for video is an important topic, especially in the context of today's high-speed communication networks. Video services are being accessed by users on a wide range of platforms, from STBs to Smartphones and Tablets. Also, these video services are delivered using different methods, such as traditional IP Tv using multicast or HTTP based streaming for OTT content. There are different testing methods, such as referenced video quality measurements, IP level analysis for video content or pixel level analysis, each with its own advantages and disadvantages. In this presentation, a flexible non-referenced method for video quality testing is presented, that can be applied to any type of video content, regardless of underlying transport protocols and video format. The method is based on capturing video content via HDMI and analyzing the captured video frame by frame to produced KPIs such as freezing, blocking, block loss, bluer and others. In addition, we present a method for testing TV channel availability that can be used to identify if TV content is available. The method can be automated for 24/7 monitoring of video content.