

A COMPARATIVE ANALYSIS OF ADVANCE THREE DIMENSIONAL VIDEO CODING FOR MOBILE THREE DIMENSIONAL TV

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ABSTRACT

Study on various techniques pertaining stereo video compressions for mobile three dimensional services are presented in this paper. Efficient compression is required for mobile services because of various limitations like memory, bandwidth and processing power. There are various techniques exist for encoding of three dimensional video content for three dimensional mobile Television are examined and compared. These techniques are H.264/MPEG-4 AVC simulcast coding, H.264/MVC technique and mixed resolution stereo coding (MRSC). The first and second techniques are based on a full left and right video content encoding, the third includes full left and a sub-sampled right video content encoding for improved coding efficiency and reduced decoding complexity. Using professional three dimensional video content, each method was tested. A comparison amongst three techniques at different bit rate is presented. The comparative results are shown between two parameters that is peak signal to noise ratio (PSNR) and bit rate.

KEYWORDS: H.264/AVC Simulcast, H.264/MVC, Mixed Resolution Stereo Coding (MRSC), Video Plus Depth