

Multi-view video plus depth representation with saliency depth video

ABSTRACT

Saliency represents a region where viewers tend to put more focus on compared to other regions in an image or video. Although there are many saliency models available, very few exploit the saliency model based on depth video sequences. This paper proposed a saliency depth based video by utilizing selected saliency maps and fusing it into depth video sequences. The proposed saliency depth based model is used with multi-view video plus depth (MVD) and compressed using the latest High Efficiency Video Coding (HEVC) compression method. The proposed method showed a notable quality improvement on the virtual view video compared to other saliency model such as the frequency-tuned saliency model.

Keyword: 3D video; High efficiency video coding; Multi-view video plus depth; Saliency