

An Objective Video Quality Assessment Metric For Cloud Gaming

The introduction of fast and reliable networks and the growth in server-based processing have provided an opportunity to run games away from the player into the cloud and offer a new service known as cloud gaming. The concept of cloud gaming is to render a game in the cloud and stream the resulting game scenes to the player as a video sequence over a broadband connection. One of the major challenges in this field is how to transmit the large amount of data over error prone channels to the devices, while maintaining a high visual quality. To guarantee a sustainable quality in error prone environments, continuous quality assessment is necessary. The evaluation of the overall visual quality of cloud gaming video requires a new objective perceptual quality measure specifically designed for this application. Although several objective quality assessment methods have been proposed for video sequences, no comparable attempt has been made for quality assessment of cloud gaming video. In this project, we propose a new methodology to build suitable objective quality assessment metrics for cloud gaming video. Our proposed methodology focuses on region of interest of the users as an effecting feature in quality assessment of cloud gaming application.

