

## عنوان مقاله:

Predicting the Empirical Distribution of Video Quality Scores Using Recurrent Neural Networks

## محل انتشار:

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## خلاصه مقاله:

Video quality assessment is a crucial routine in the broadcasting industry. Due to the duration and the excessive number of video files, a computer-based video quality assessment mechanism is the only solution. While it is common to measure the quality of a video file at the compression stage by comparing it against the raw data, at later stages, no reference video is available for comparison. Therefore, a no-reference (Blind) video quality assessment (NR-VQA) technique is essential. The current NR-VQA methods predict only the mean opinion score (MOS) and do not provide further information about the distribution of people score. However, this distribution is informative for the evaluation of QoE. In this paper, we propose a method for predicting the empirical distribution of human opinion scores in the assessment of video quality. To this end, we extract some frame-level features, and next, we feed these features to a recurrent neural network. Finally, the distribution of opinion score is predicted in the last layer of the RNN. The experiments show that averages of predicted distributions have comparable or better results with previous methods on the KonVid-1k dataset.

## کلمات کلیدی:

(Distribution, No-Reference, opinion score, Recurrent Neural Network (RNN), Video Quality Assessment (VQA)

## لینک ثابت مقاله در پایگاه سیویلیکا:

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