CLASSIFICATION BASED DATA MIXING FOR HYBRID DE−INTERLACING TECHNIQUES (TueAmOR9)

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Abstract :

De−interlacing is one of the key technologies in modern displays and multimedia personal computers. Various methods have been proposed including motion compensated (MC) methods and non motion compensated methods. Hybrid methods that combine different de−interlacing techniques are widely used to take advantages from individual algorithms. The combination is normally based on the quality criterion of individual de−interlacing algorithms. In this paper, we propose a classification based data mixing algorithm for hybrid de−interlacing. The algorithm first classifies the interpolated pixels from individual de−interlacing methods and then mix them to give the final output. The optimal mixing coefficients are obtained from an off−line training, which employs the Least Mean Squared (LMS) algorithm.

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