



ADAPTIVE DICTIONARIES FOR MATCHING PURSUIT WITH SEPARABLE DECOMPOSITION (WedAmPO3)

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✱ Abstract :

This paper presents a learning scheme for dictionaries of two-dimensional functions for matching pursuit applied in low-bitrate video coding. The motivation is to improve the coding performance of matching pursuit compression by adapting the structure of the dictionary functions to specific types of sequences. The proposed scheme is based on separable decomposition and vector quantization. The experiments with test video sequences prove that AVC/H.264 video encoder with the proposed variant of matching pursuit coding of interframe residual exhibits improved compression performance.