In this paper, a new PCA based method for video compression is introduced. This method extracts the features of video frames and process them adaptively based on required accuracy. This idea improves the quality of compression effectively. In this paper, we focused on the fact that video is a composition of sequential and correlated frames, so we can apply the PCA to these high correlated frames. Most of other video compression methods use DCT transform to compression. DCT causes to large damage in the edges of frames which plays fundamental role in quality of video. Our method in this paper doesn’t reduce the bandwidth of frequency response, so the edges of frames don’t fade.

References

- J. Yang, D. Zhang, A. F. Frangi and J. Y. Yang, "Two-Dimensional PCA: A New
Adaptive Video Compression using PCA Method


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Computer Science

Keywords
Video Compression Correlation Pca Svd 2dpca Frame Feature Extraction Database Psnr Bit Rate.