

# Jordan University of Science and Technology

## Color Image Compression Using Combined VQ Algorithms

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**Abstract:** In this paper, two VQ algorithms are introduced: 1) VQ with a Fast Clustering Algorithm (VQ-FCA) that can be implemented for codebook production, and, 2) VQ with a partially reordered codebook (VQ-PRCB), that extracts the correlation between adjacent VQ indices. Based on these algorithms, two schemes are proposed : 1) 2D VQ, & 2) combined 3D VQ schemes. Experimental results are compared with other algorithms to show its advantages.