Abstract

In this paper, an efficient image compression scheme is introduced, it is based on partitioning the image into blocks of variable sizes according to its locally changing image characteristics and then using the polynomial approximation to decompose image signal with less compressed information required compared to traditional predictive coding techniques, finally Huffman coding utilized to improve compression performance rate. The test results indicate that the suggested method can lead to promising performance due to simplicity and efficiency in terms of overcoming the limitations of predictive coding and fixed block size.

References


**Index Terms**

Computer Science  
Image Processing

**Keywords**

Image compression  
compression techniques  
quadtree and polynomial representation