Abstract

Fractal Compression is a new technique in the field of color and video compression. This technique has grabbed much attention in recent years because of very high compression ratio that can be achieved. It also provides interesting interpolation features to zoom the images. Hybrid schemes incorporating fractal compression and speedup techniques have achieved better compression ratio compared to pure fractal compression. Fractal Transform compresses color images and videos better than gray scale images because the color planes are highly correlated to each other and video sequences are temporally correlated. This review represents a survey of the most significant advances in the field of fractal grayscale/color image and video compression. In this paper, we review various types of approaches for fractal based compression scheme and some of the latest techniques to improve the encoding time as well as decoded image/video quality.

References

Review of Fractal Transform based Image and Video Compression


Review of Fractal Transform based Image and Video Compression

- Dietmar Saupe, "Accelerating Fractal Image Compression by Multi-Dimensional Nearest Neighbor Search," IEEE proceeding Data Compression Conference, pp. 222-231,
Review of Fractal Transform based Image and Video Compression

1995.
Review of Fractal Transform based Image and Video Compression


Index Terms

Computer Science
Image Processing
Keywords
Fractal Transform  Color and video compression  Iterated function systems  Block Classification and Feature Extraction