Abstract

Secret fragment visible mosaic image is proposed for combining small tiles of secret image to form a target image in the sense of mosaic. When this mosaic image is viewed at close, the observer can view smaller elements, but when viewed at a distance mosaic image is collection of tiles combined together to yield the overall picture. To generate a mosaic image, divide original image into many tiles. Before splitting the image, compare the image for Mosaic creation. Mosaic image is created by composing small tiles of a given secret image into target image, achieving an effect of embedding the given secret image secretly in the resulting mosaic image. To create the mosaic image, first search a similar target image corresponding to the selected secret image. Then find a best fit secret image tile for embedding in the target image blocks. A new secure picture transmission system is proposed, which changes consequently a given expansive volume mystery picture into a purported mystery part noticeable mosaic picture of the same size.

**Index Terms**

Computer Science  
Image Processing

**Keywords**

Color transformation, data hiding, image encryption, mosaic image, secure image transmission