Abstract

In this paper, a hybrid method for occlusion removal using Finite element based Bi-dimensional Empirical Mode Decomposition (FE-BEMD) and Exemplar based image inpainting is discussed. Initially, the image is decomposed into Intrinsic Mode Functions (IMFs) and a Residue using FE-BEMD. Then the Exemplar based image inpainting algorithm is applied
to each of the IMFs and residue and the results are added together to get the inpainted image. The results obtained shows that the proposed method works well for removing large objects as well as small damages like scratches from images.

Reference

- Object Removal by Exemplar-based Inpainting available at http://www.cc.gatech.edu/~sooraj/inpainting/

Index Terms

Computer Science

Security

Key words

Image inpainting

Empirical Mode Decomposition

Intrinsic Mode Function

Delaunay Triangles

Texture synthesis

texture propagation