Abstract

Many images nowadays are captured from behind the glasses and may have certain stains discrepancy because of glass and must be processed to make differentiation between the glass and objects behind it. This research paper proposes an algorithm to remove the damaged or corrupted part of the image and make it consistent with other part of the image and to segment objects behind the glass. The damaged part is removed using total variation inpainting method and segmentation is done using kmeans clustering, anisotropic diffusion and watershed transformation. The final output is obtained by interpolation. This algorithm can be useful to applications in which some part of the images are corrupted due to data transmission or needs to segment objects from an image for further processing.

References

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Index Terms
- Computer Science
- Image Processing

Keywords
- Segmentation
- In-painting
- K-means Clustering
- Watershed Transform
- Anisotropic Diffusion