Abstract

This paper describes that how we can implement various techniques using "Seam Carving
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for Image and Video Retargeting" which would solve many problems that arise during the displaying, scaling, resizing of the various images and videos [1,2,3]. In this paper you will go through many techniques and their implementations that have been proposed by many authors using Seam Carving for Image and Video Retargeting. Seam carving that is also known as image retargeting, scaling, liquid resizing, or liquid rescaling; is generally an algorithm for image resizing that was developed and introduced by Shai Avidan, of the Mitsubishi Electric Research Laboratories (MERL), and Ariel Shamir, of the Interdisciplinary Center and MERL[1]. As per the algorithm suggested by the author, you have to establish number of seams in the selected image and further automatically remove seams to reduce the size of the image. The same approach is adopted for video retargeting except the fact that you use video frames instead of objects in the image. The paper discusses various approaches that have been adopted by various authors in this respect.

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Analysis of Seam Carving Techniques for Image and Video Retargeting


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Liquid Rescaling

Content-aware Scaling