**Image retargeting using depth assisted saliency map**

F. Shafieyana, N. Karimia,⁎, B. Mirmahboubb, S. Samavi, S. Shirani

(seam-carving)

* Energy function: saliency map, depth map, and gradient map
* And algorithm to adaptively assign proper weights to these three maps
* Calculate a switching threshold based on energy ma

The gradient is sensitive to energy change in object edges and causes deformations.

Methods: saliency, diffusion map, saliency + gradient(edge detector, face detector, and line detector), combine seam carving with cropping and scaling, depth map, using just noticeable difference (JND) model for seam selection, and wrapping based methods.

Proposed method

This switching threshold is used to properly decide when to switch from seam carving to scaling when the image size is being reduced.

* An image needs more information from saliency map if it has an important object in the foreground.
* While depth map is more effective in preserving salient regions in an image with important objects scattered in different depths.