saliency map

- input

boundary of above-threshold region perturbation kernel map update with local saliency

A threshold function determines minimum saliency for further perturbation. Regions below threshold are not explored further.

The perturbation kernel decreases in size to generate a higher resolution mapping for the most salient regions.

Repeat until minimum kernel size is reached.

Saliency Mapping with Hierarchical Perturbation

Jessica Cooper, University of St Andrews



Hierarchical Perturbation (HiPe); Random Input Sampling for Explanation (RISE); Extremal Perturbation (ExtP); Guided Backpropagation (Guid.); Gradient (Grad); Grad-CAM (GCAM); Contrastive Excitation Backpropagation (cMWP); Deconvnet (DConv); and Excitation Backpropagation (MWP).