

1. Steps:
 - a. Blur the image
 - b. Subtract blur image from original
 - c. Add the difference to the original for a sharper image
2. As level increases image becomes blurry. This is because each pixel contains a local average that corresponds to a pixel neighborhood on a lower level (original is the lowest level) of the pyramid. As levels increase, the construction from laplacian happens from the significantly blurrier versions of the image. Hence, reconstruction is blurrier.
3. When double sized images are used for storing the integral image, we can reconstruct the image. If the integral image is restricted to uint8, reconstruction is not possible. Range goes out of bounds and image appears white.
Block mapping/texture mapping, computing gradients $x_{\text{gradient}} = (r_{\text{block}} - l_{\text{block}}) / s$; 3MN additions originally.
Yes we store a cumulative sum array s , which requires extra storage.
4. Applications are detecting salient portions of an image.