An Innovative of Pyramid-Based Fusion for Generating HDR Images in Common Display Devices!

High Dynamic Range (HDR) image can be done by measuring the salient areas/pixels along the input images and merge them together using Pyramid based fusion.

Limitation:

- Cannot retrieve the local information nicely.
- Due to the effect of interpolation, some details may be overexposed and become more white

We try to solve the inherent limitation of pyramid-based fusion techniques using the dodge and burn techniques. The effect in each level of pyramid is also considered in this approach in order to retrieve the local information without constructing the seam boundary and halo effects.

1. [Diagram showing input images, Gaussian function, weighted map, and resulted image]

2. [Diagram showing dodge and burn effect, input images, and resulted image]