

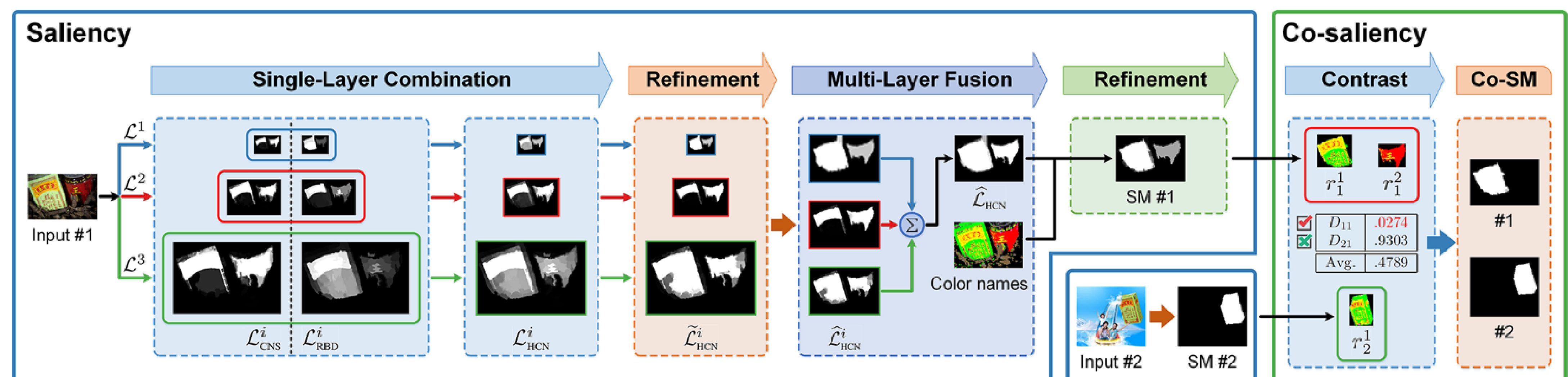
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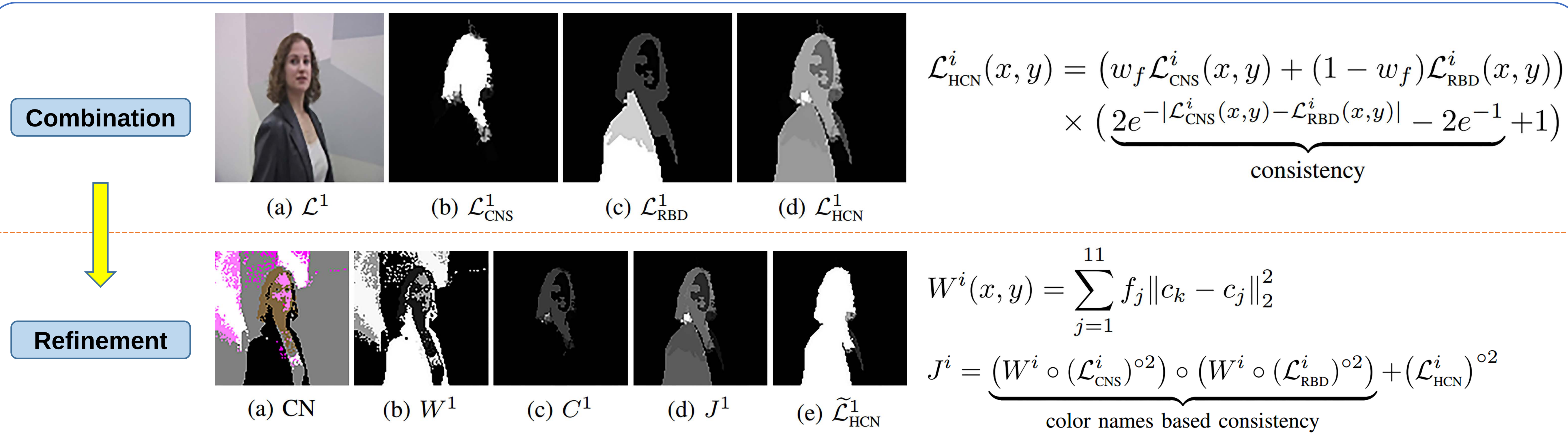
1. Introduction

A bottom-up and data-driven model is introduced to detect co-salient objects from an image pair. At each layer, two existing saliency models are combined to obtain initial saliency maps. Then a global color cue with respect to color names is invoked to refine and fuse single-layer saliency results. Finally, a color names based distance metric is used to measure the color consistency of all salient regions and remove non-co-salient ones.

2. Pipeline



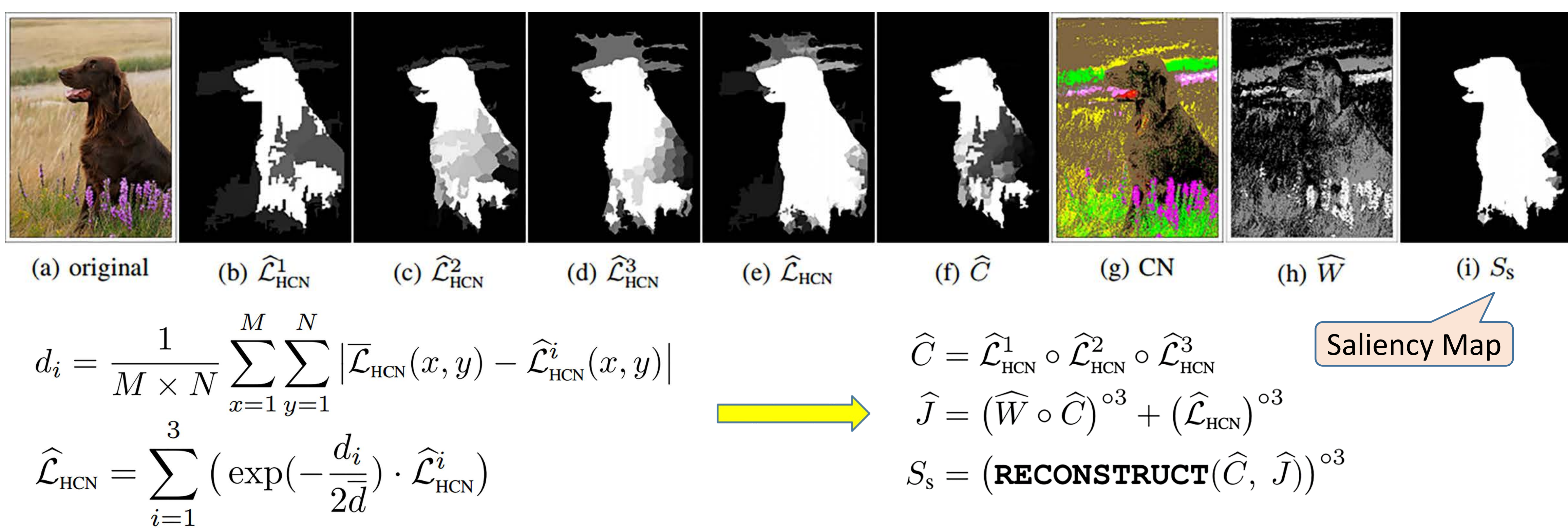
3. Single-Layer Combination and Refinement



MATLAB Code

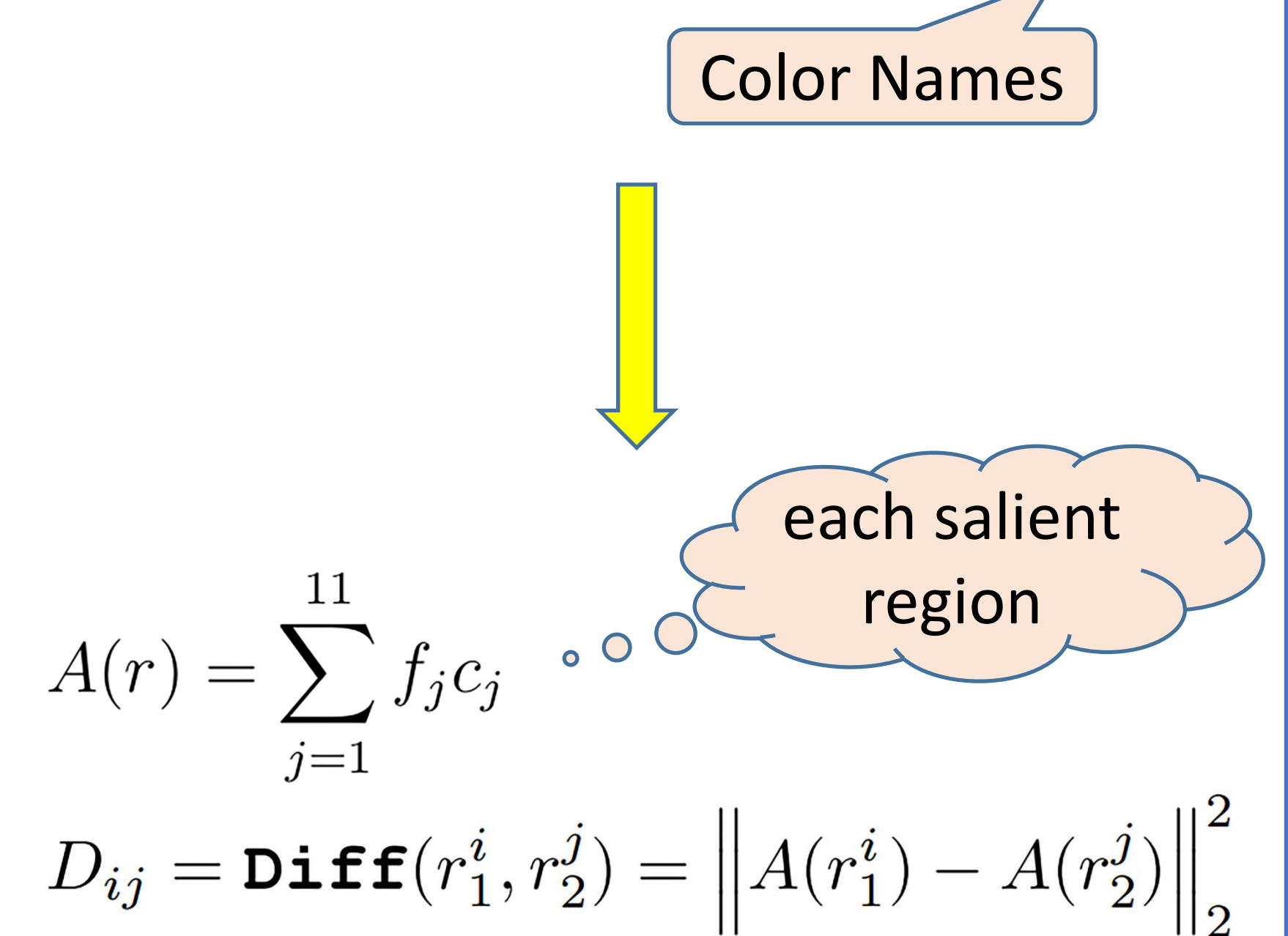


4. Multi-Layer Fusion and Refinement

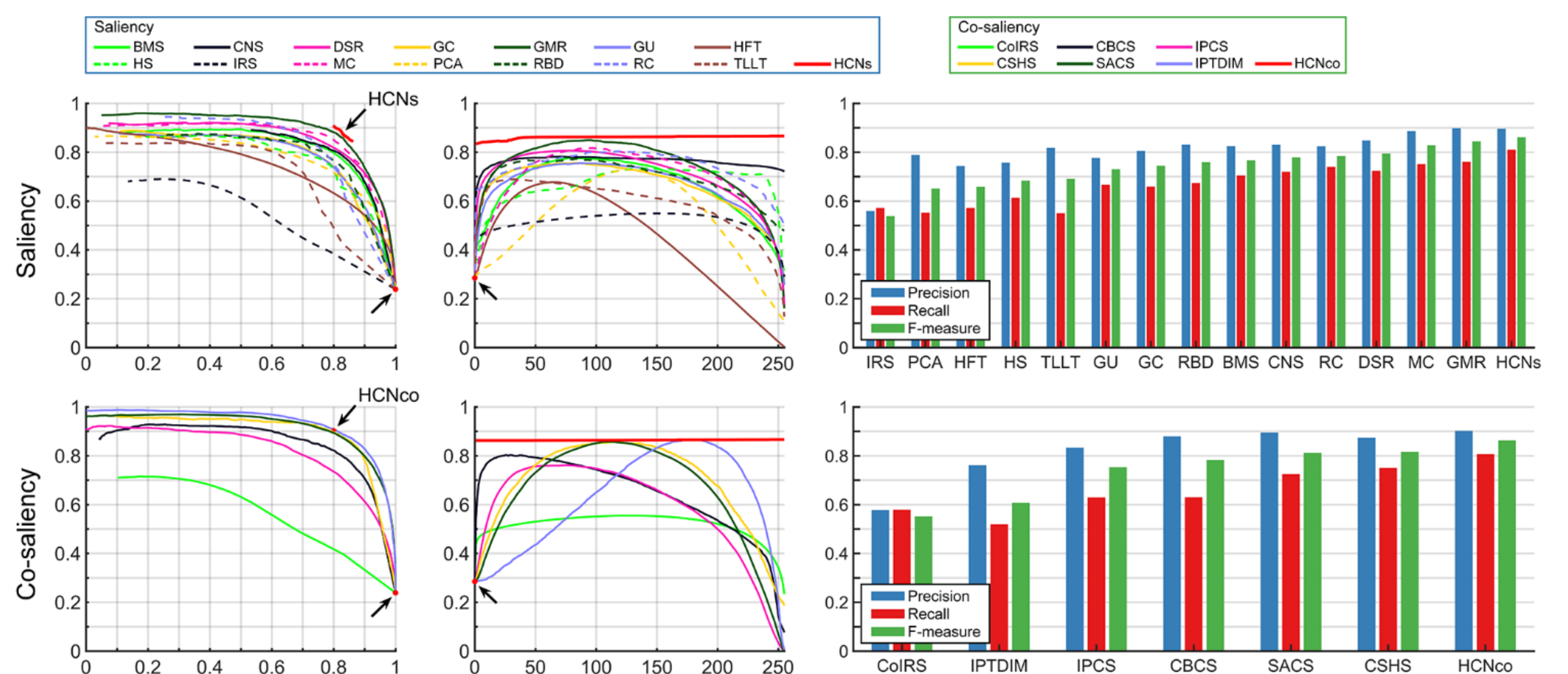
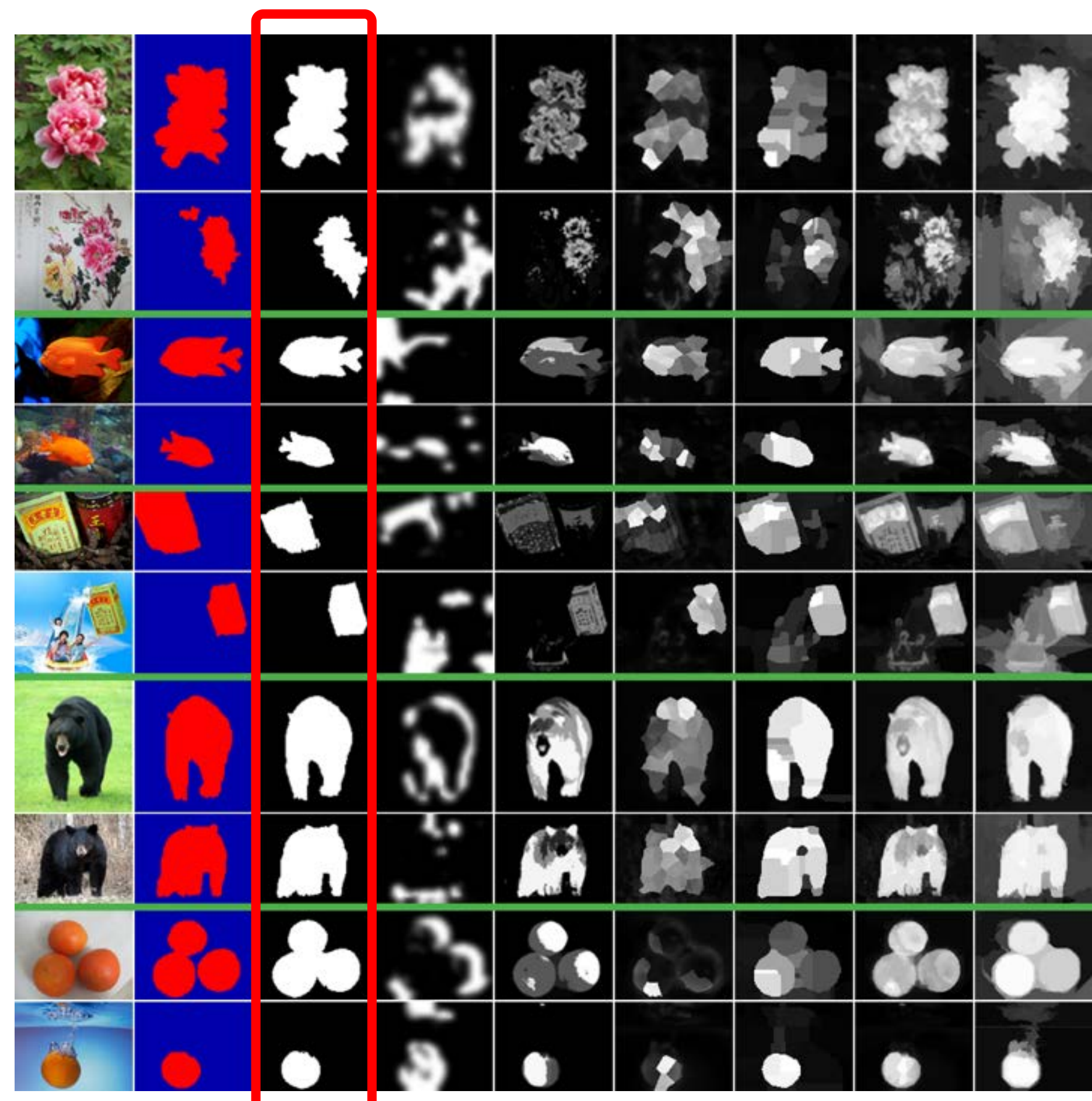


5. Co-saliency Detection

Co-saliency = Saliency × Repeatedness



6. Results



References

- [1] J. Lou, H. Wang, L. Chen, Q. Xia, W. Zhu, and M. Ren, "Exploiting color name space for salient object detection," arXiv:1703.08912 [cs.CV], 2017. (CNS)
- [2] W. Zhu, S. Liang, Y. Wei, and J. Sun, "Saliency optimization from robust background detection," CVPR 2014. (RBD)
- [3] J. van de Weijer, C. Schmid, and J. Verbeek, "Learning color names from real-world images," CVPR 2007. (Color Names)