



Structural Machine Learning Models and Their Applications Paper Survey <I>

Deep Colorization

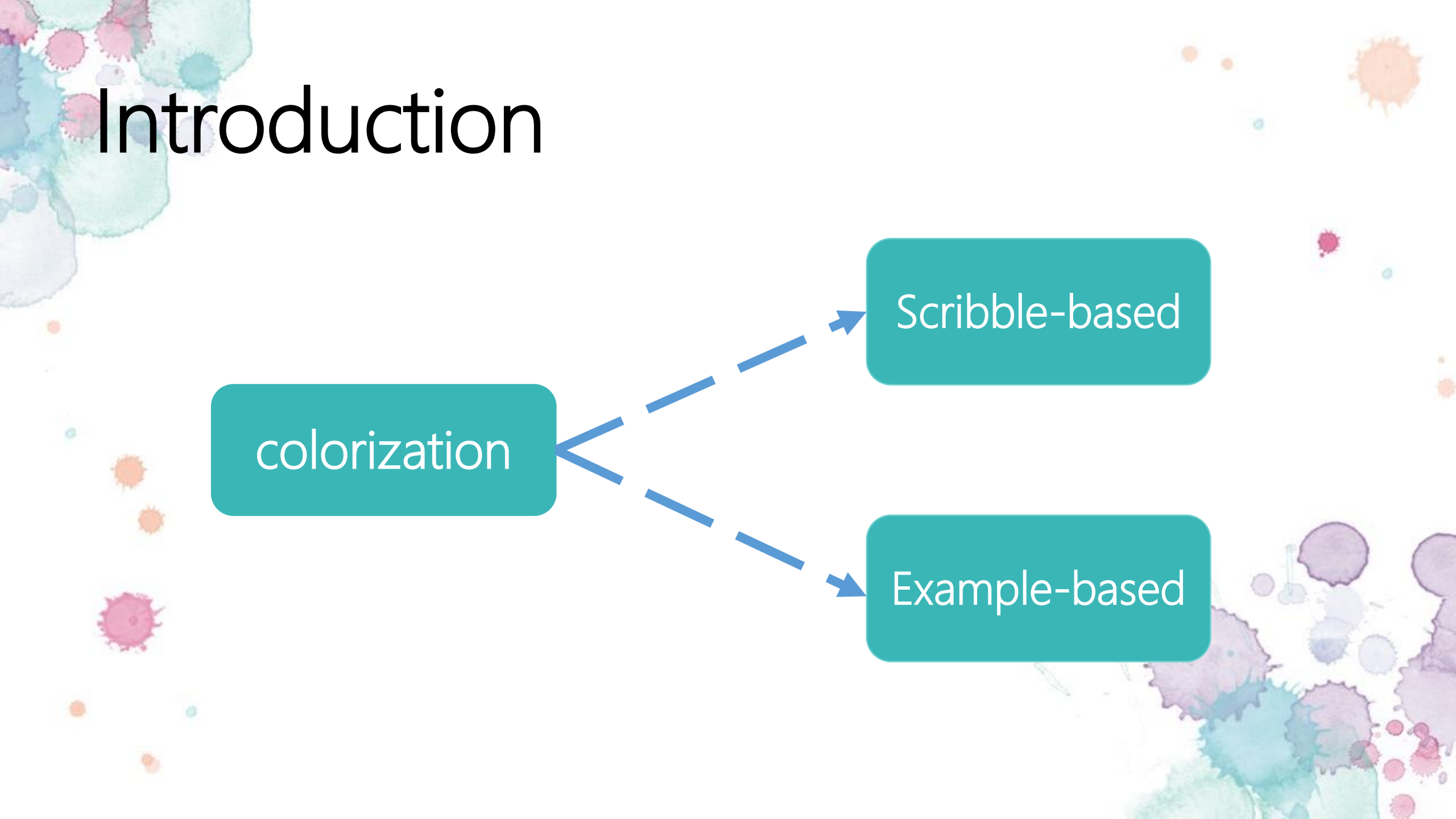
Chen, Ting-Yin



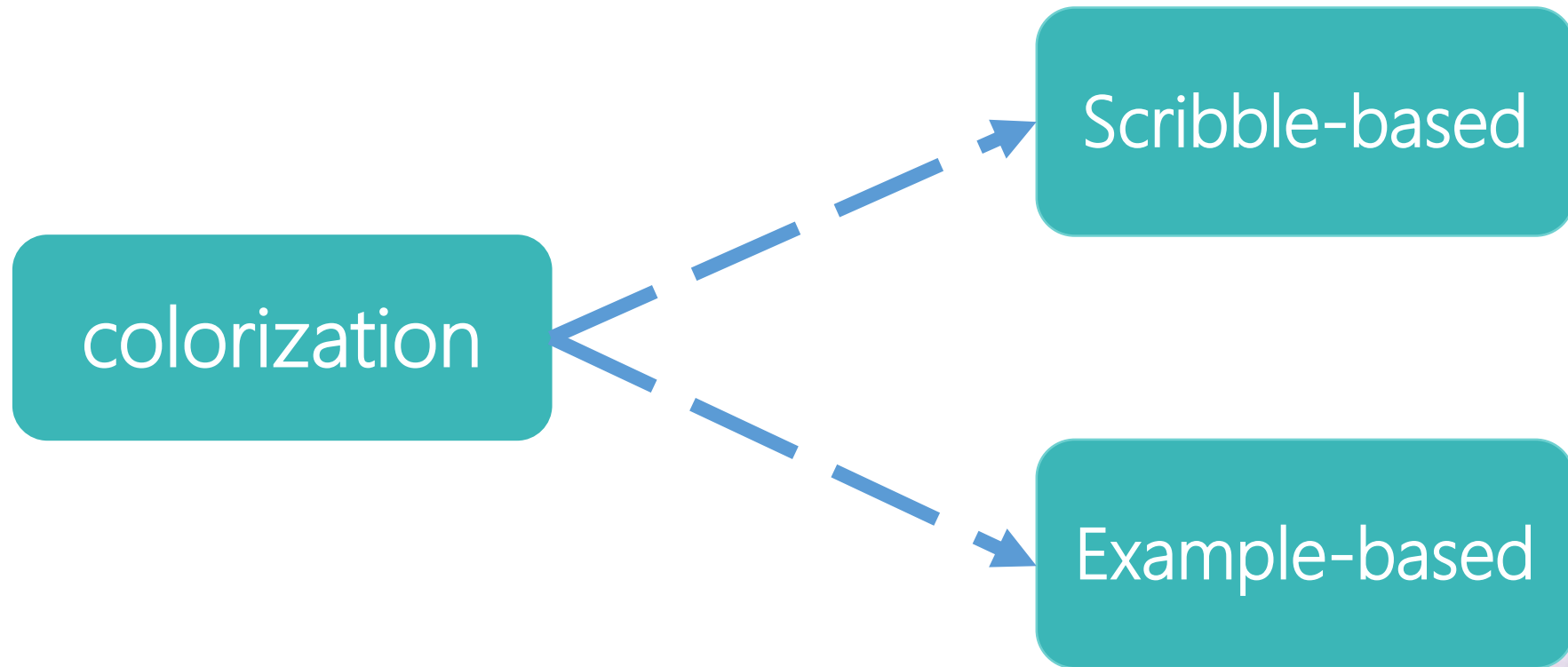
Content

- Introduction
- Model
- Result
- Reference





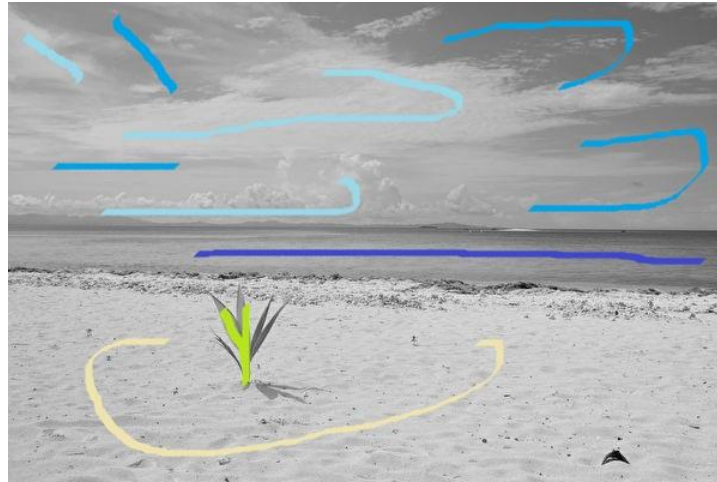
Introduction



Scribble-based



grayscale image



Scribbled image



colorized image

Example-based



input grayscale image



Reference 1



Reference 2



ground truth image

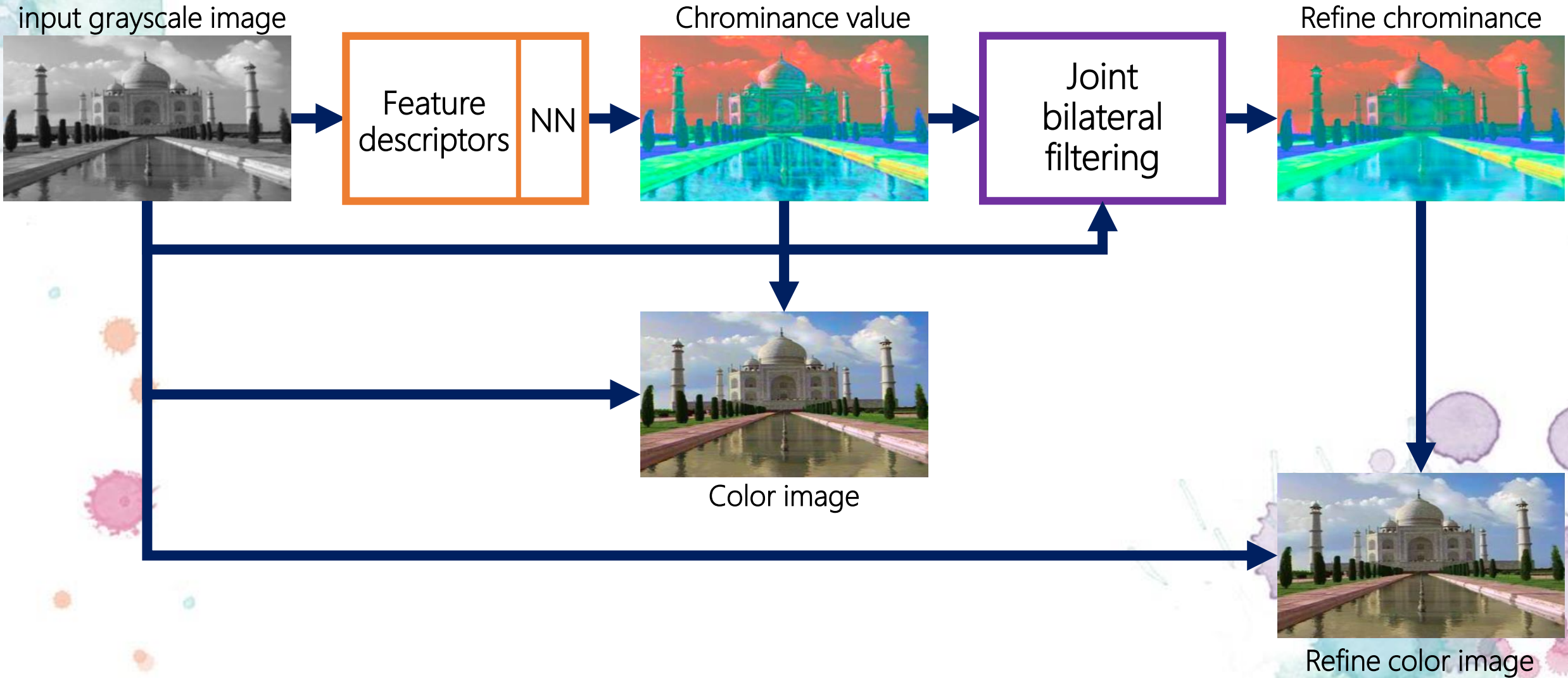


Result from Reference 1

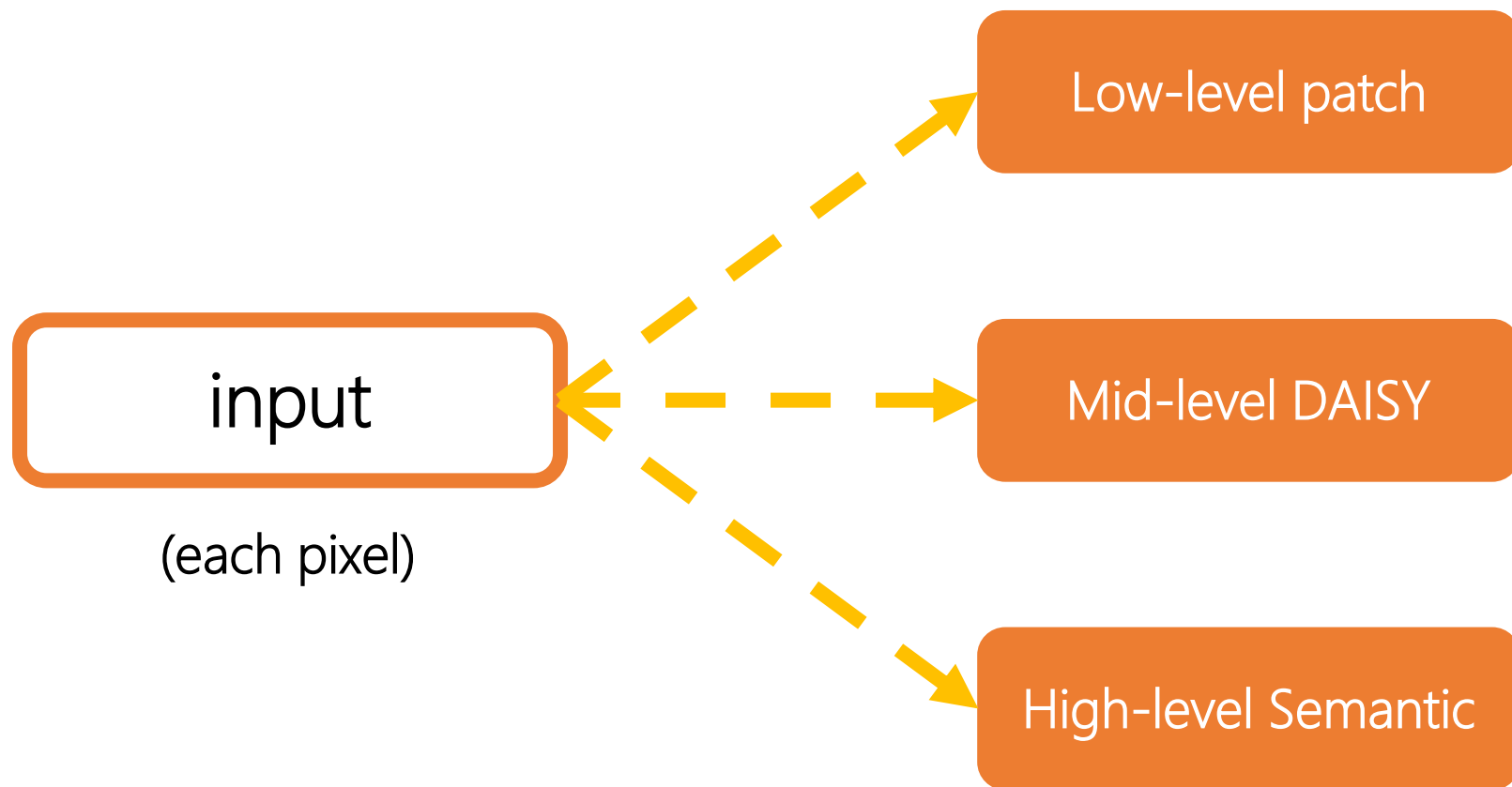


Result from Reference 2

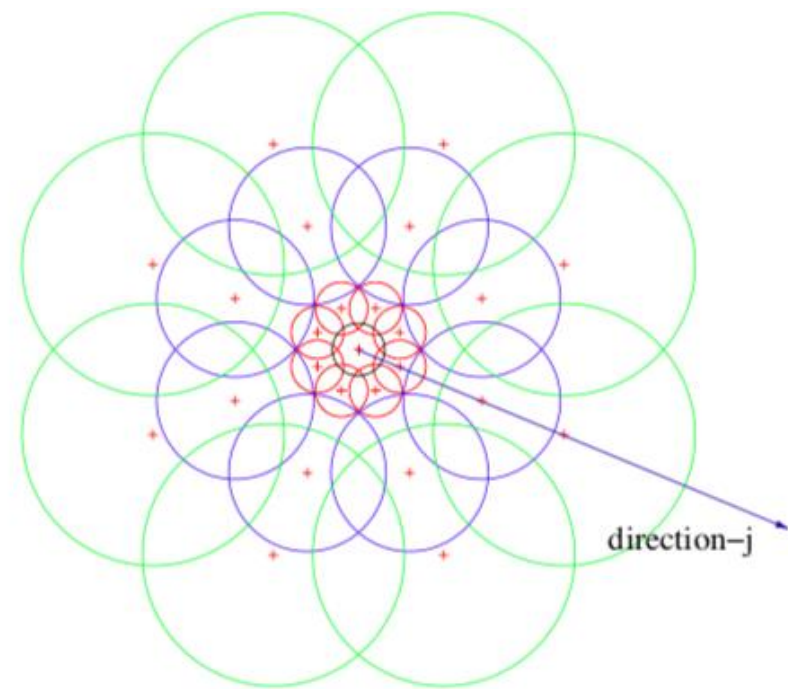
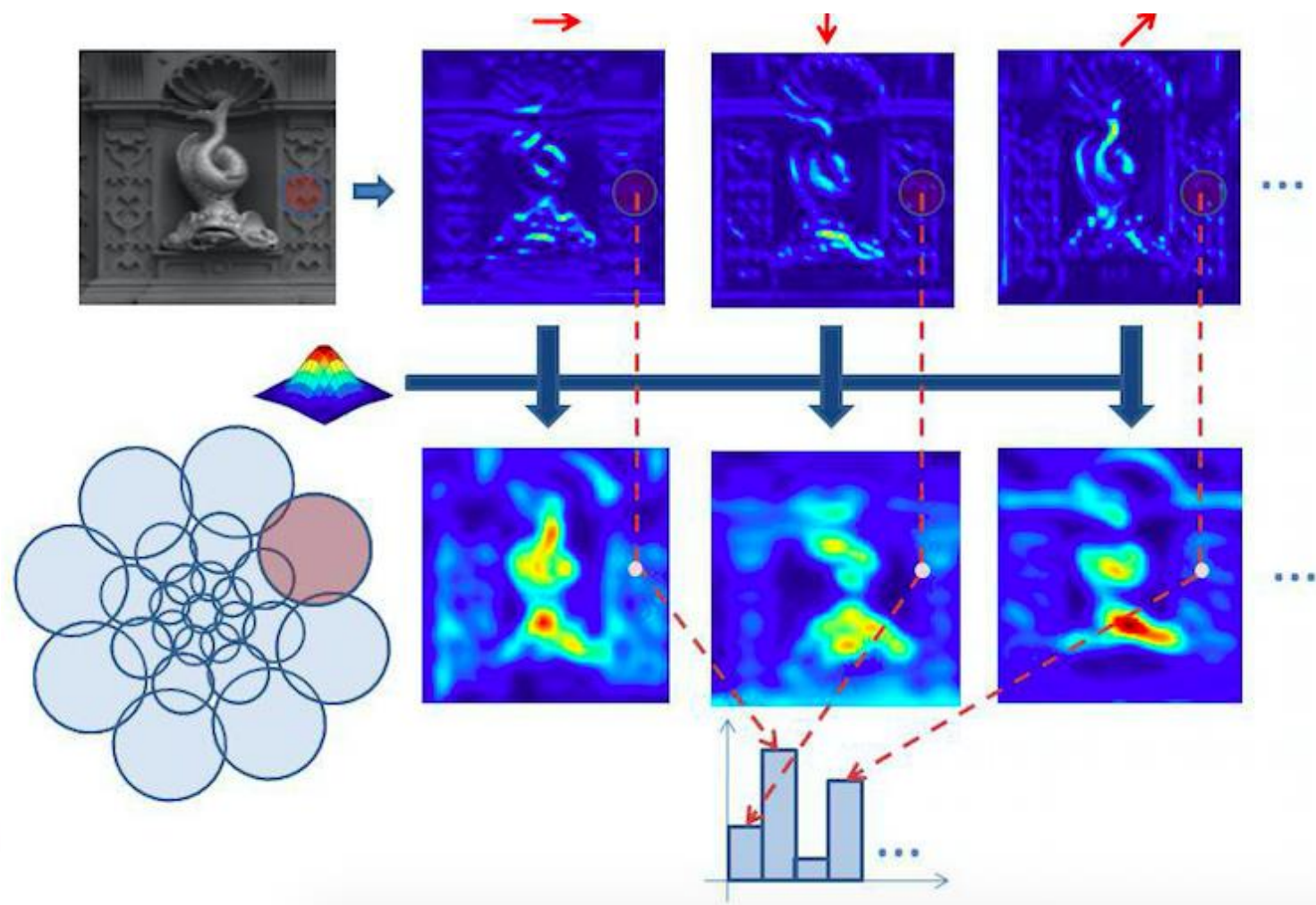
Model



Feature descriptors



DAISY



Result

Input

Proposed

Ground truth

City



30dB



Road



31dB



Beach



27dB





References

- E. Tola, V. Lepetit, and P. Fua. A fast local descriptor for dense matching. In CVPR, pages 1–8. IEEE, 2008.
- J. Long, E. Shelhamer, and T. Darrell. Fully convolutional networks for semantic segmentation. In CVPR, pages 3431–3440. IEEE, 2015.
- G. Petschnigg, M. Agrawala, H. Hoppe, R. Szeliski, M. Cohen, and K. Toyama. Digital photography with flash and no-flash image pairs. ToG, 2004.

