Top down saliency estimation via superpixel-based discriminative dictionaries: Supplementary material

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In this supplementary material, we present additional results we get on the Graz-02 and PASCAL VOC 2007 datasets.

1 Graz-02

More salient object detection results can be seen in Figure 1, Figure 2 and Figure 3 for the bike, car and people classes in the Graz-02 dataset, respectively. For each class, we both present the results of Alexe et al.'s generic objectness map [1] (on superpixel-level), Yang and Yang's top-down salient object detection method [2] and the proposed method (setting 3). To distinguish between task-dependent and bottom-up approaches, we use different colors for different search tasks and use the heat map for the results of [1].

2 PASCAL VOC 2007

In Figure 4, we show more results on PASCAL VOC 2007 dataset for different object classes exist in the dataset. Here, again we use different color for different search tasks.

References

[1] B. Alexe, T. Deselares, and V. Ferrari. What is an object? In *CVPR*, 2010.

[2] J. Yang and M.-H. Yang. Top-down visual saliency via joint CRF and dictionary learning. In *CVPR*, pages 2296–2303, 2012.

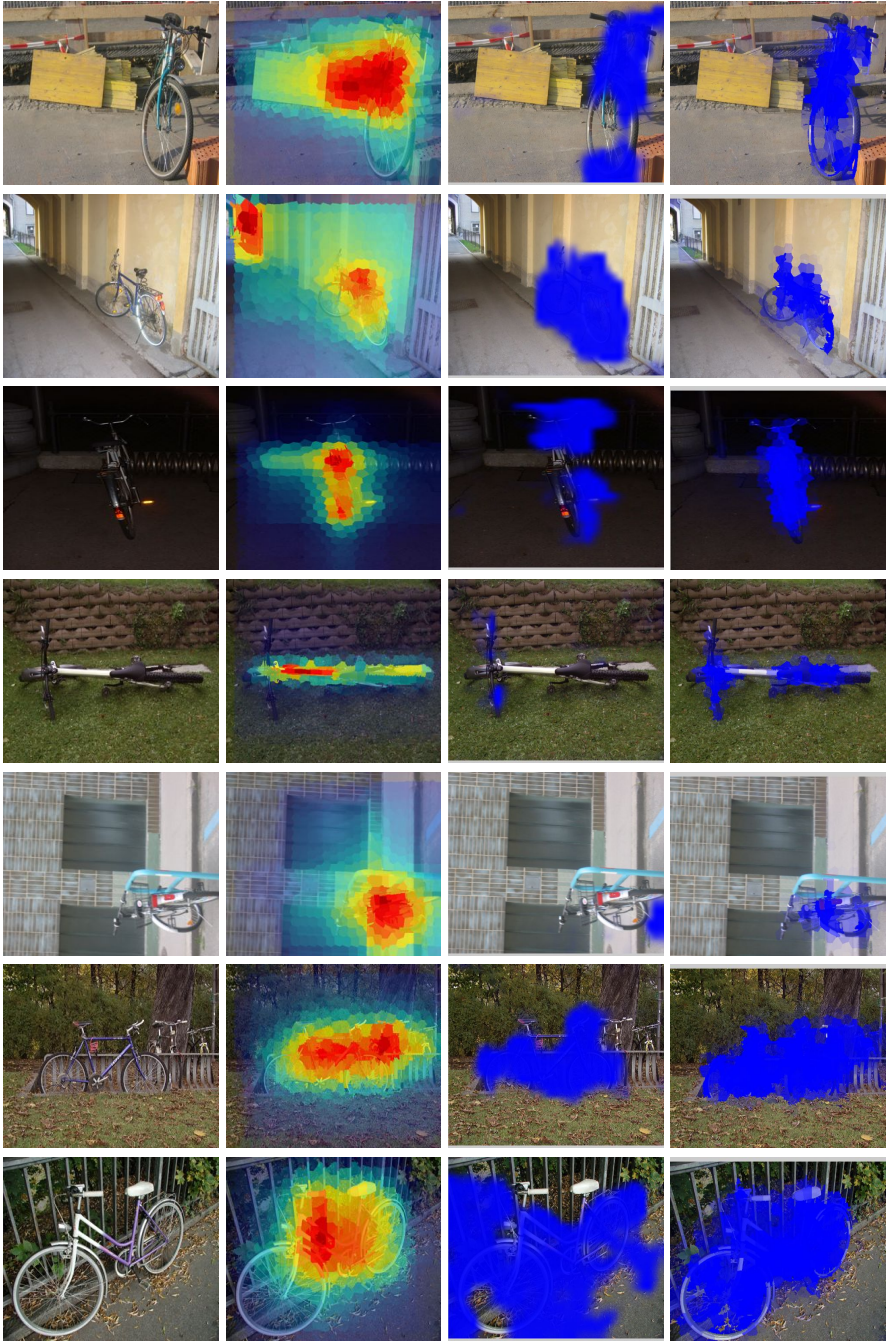Input image   Objectness [1]   Top-down model of [2]   Proposed approach

Figure 1: More results for bike class on the Graz-02. From left to right, input images, the results of the objectness model of [1], the top-down model of [2] and the proposed approach.

Input image   Objectness [1]   Top-down model of [2]   Proposed approach

Figure 2: More results for car class on the Graz-02. From left to right, input images, the results of the objectness model of [1], the top-down model of [2] and the proposed approach.

| Input image | Objectness [1] | Top-down model of [2] | Proposed approach |

Figure 3: More results for people class on the Graz-02. From left to right, input images, the results of the objectness model of [1], the top-down model of [2] and the proposed approach.
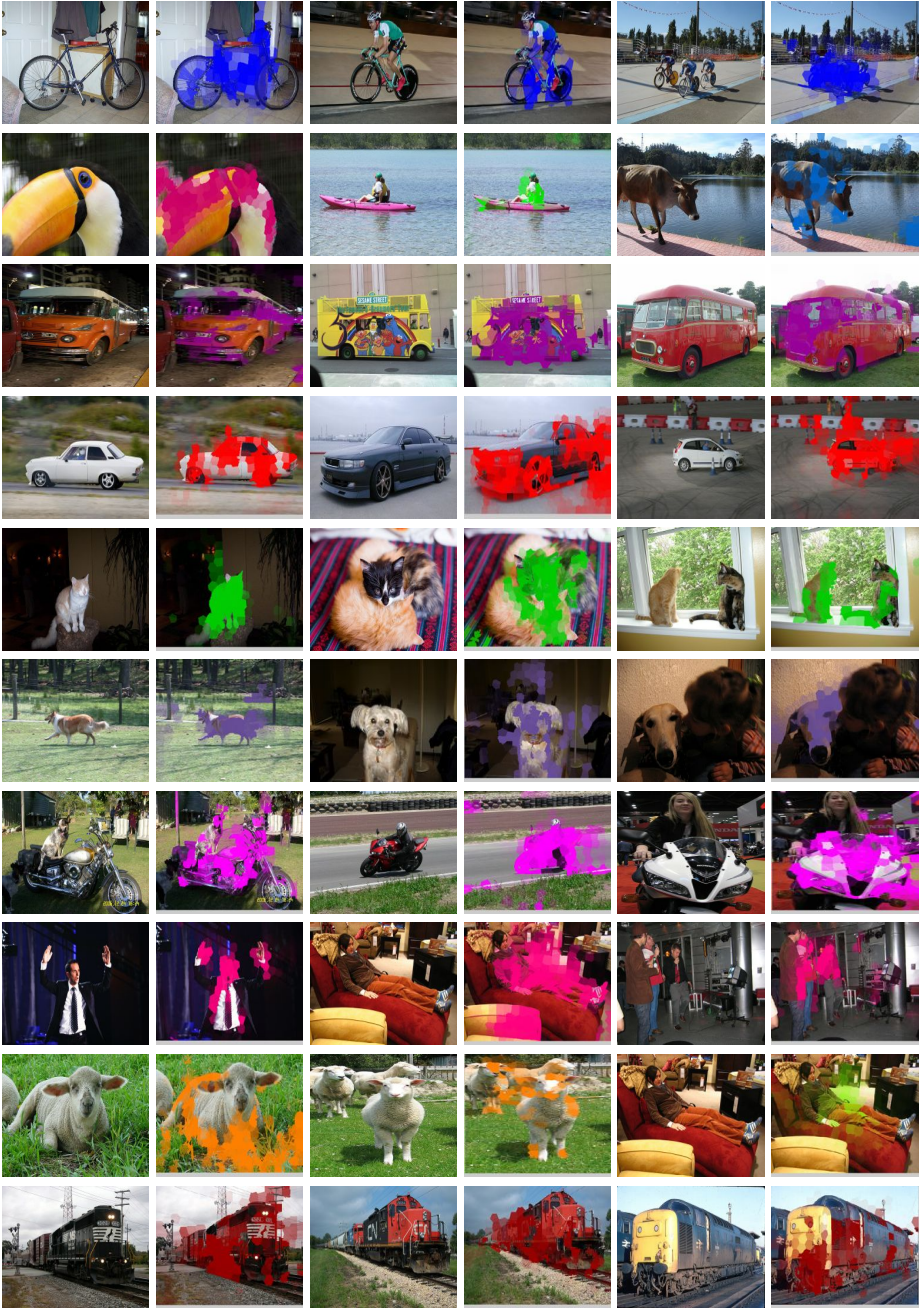
Figure 4: More results on the PASCAL VOC 2007 dataset.