

# Hierarchical Context Embedding for Region-based Object Detection (Supplementary Materials)

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## 1 Visualization

In Fig. 1, we give some example images, produced by the baseline FPN (*left with red border*) and our HCE FPN (*right with green border*), respectively. The first row shows that our HCE framework can effectively filter out false positive background detection, *e.g.*, the “clock” in the first example image, while the second row shows that our method can assist in correctly classifying context-dependent objects, *e.g.*, the “kite” and “umbrella” in the third example image. This visualization and comparisons further demonstrates the motivation of our HCE framework.



**Figure 1.** Visualization and comparisons of the output results produced by the baseline FPN (*left with red border*) and our HCE FPN (*right with green border*), respectively. **First row:** our context embedding framework can effectively filter out false positive background detection. **Second row:** our framework also enable better classification performance for context-dependent objects. Best viewed in color.