Selective Search for Object Recognition

Summary

1. Propose a hierarchical, bottom-up and class-agnostic strategy for detecting object location.

2. The approach works by:
   - Create an initial list of regions
   - Greedily group regions together based on pre-defined similarity function.

3. Argue that there are a variety of reasons for a region to form an object. Therefore, a single grouping strategy can not capture all object locations => Propose diversification strategies based on varying the color space, similarity function and initial regions.
   -> This is to ensure the capturing of all possible obj locations.

4. Proposes 3 variants:

"Single strategy" "Selective Search Fast" "Selective Search Quality"

From left to right:
- Quality of obj proposal, measured by Mean Average Best Overlap, increases
- Computational cost increases.