

Project 4 Writeup

Instructions

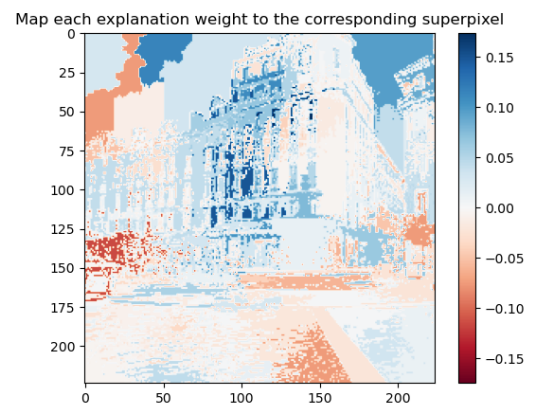
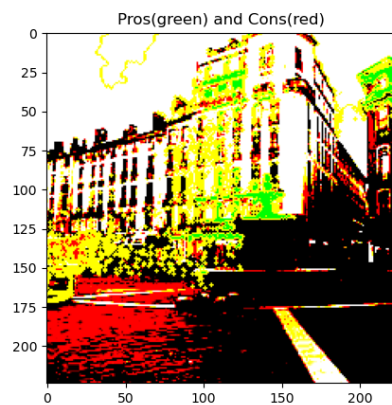
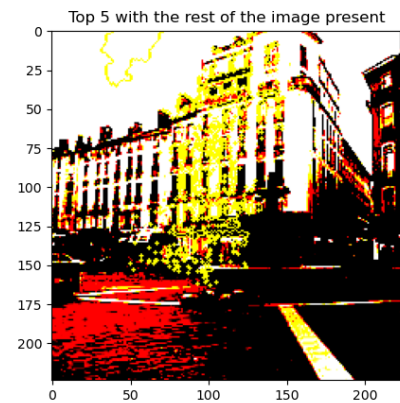
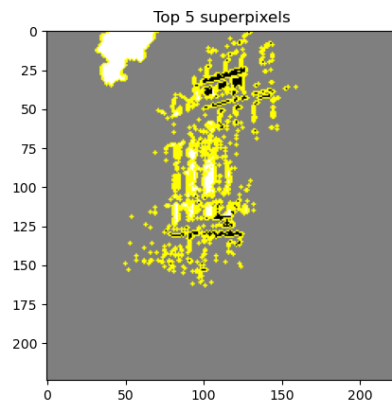
- Provide an overview about how your project functions.
- Describe any interesting decisions you made to write your algorithm.
- Show and discuss the results of your algorithm.
- Feel free to include code snippets, images, and equations.
- List any extra credit implementation and result (optional).
- Use as many pages as you need, but err on the short side.
- **Please make this document anonymous.**

Design my model I started designing this model with a standard triangle Conv2D structure with one convolution layer combining with a MaxPooling2D. I used "relu" activation "same" padding.

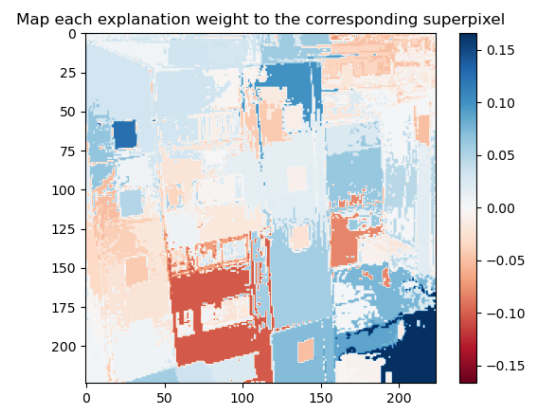
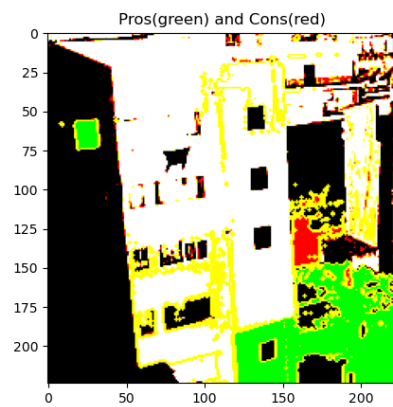
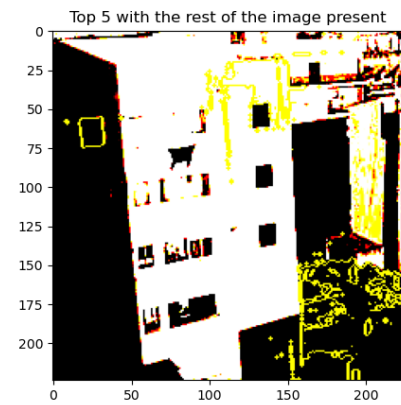
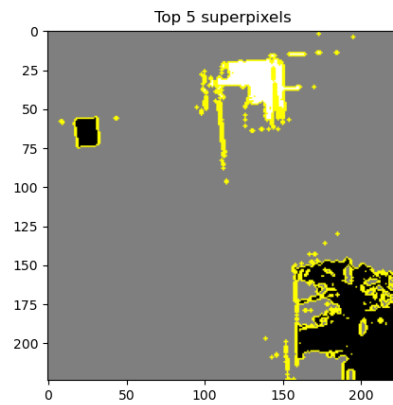
1. Result 1 (Figure) is about image0180 in InsideCity, which is incorrectly predicted as street.
2. Result 2 (Figure) is image0110 in TallBuilding, which is incorrectly predicted as InsideCity.



Figure 1: *Left*: 0180 InsideCity. *Right*: 0110 TallBuilding.



Explanation Since this picture have half of it's weight as street related pixels, and its weights map is somewhat reverse to those correctly predicted images, which have negative weights over buildings and positive otherwise. This might cause the model to recognize it as street instead of a combination of street and InsideCity objects.



Explanation The top5 superpixels here does not capture a outline of a building, which should be rectangular shapes, but captures some irregular shapes. This might cause the model to consider it as an InsideCity objects instead of buildings.