

Visualization and Interpretation

LATEST SUBMISSION GRADE

100%

1. Consider the following code for Class Activation Maps. Which layer(s) of the *model* do we choose as outputs to draw out the class activation map ? Check all that apply.

1 / 1 point

- ☐ The layer which feeds *input* to the model
- ☐ The layer which performs *concatenation* in the model
- ☒ The layer which performs *classification* on the model

✓ Correct
Correct!

- ☒ The layer which holds the extracted *features* in the model

✓ Correct
Correct!

2. To compute the Class Activation Map you _____.

1 / 1 point

- ☒ Take the dot product of the features associated with the prediction on the image, with the weights that come from the last global average pooling layer.
- ☐ Take the dot product of the weights associated with the prediction and the output of the classification vector.
- ☐ Take the dot product of the features and the output of the classification vector.

✓ Correct
Correct!

3. In a Saliency map you get to see parts of the image the model was paying attention to when deciding what class to assign to the image.

1 / 1 point

- ☒ False
- ☐ True

✓ Correct
Correct! In a Class Activation Map you get to see parts of the image the model was paying attention to when deciding what class to assign to the image. E.g. looking at a cat's face and identifying it as a cat.

4. In Saliency Maps, the pixels that most impact the final classification are found by looking at the gradients of the final layers to see which ones had the steepest curve, and figure out their location and plot them on the original image.

1 / 1 point

- ☐ False
- ☒ True

✓ Correct
Correct!

5. Which of the following statements are *not true* about GradCAM? Check all that apply.

1 / 1 point

- ☒ The *model* built to perform the task uses the *last two* layers of the *original* model as the *outputs*.

✓ Correct
Correct! This option is not true because the *model* uses the classification output layer and can use any other layer you choose.

- ☐ The gradients of the loss are computed with respect to the selected layer's output and averaged out across all feature maps.

- ☒ The negative values in the *heatmap* of the gradCAM are kept as they enhance the performance and accuracy of the gradCAM.

✓ Correct
Correct! This statement is not true. The negative values are removed from the *heatmap*.

- ☐ You stack the filter outputs on the final layer into a heatmap by calculating the mean of those values.