Do Humans Look Where Deep Convolutional Neural Networks "Attend"?

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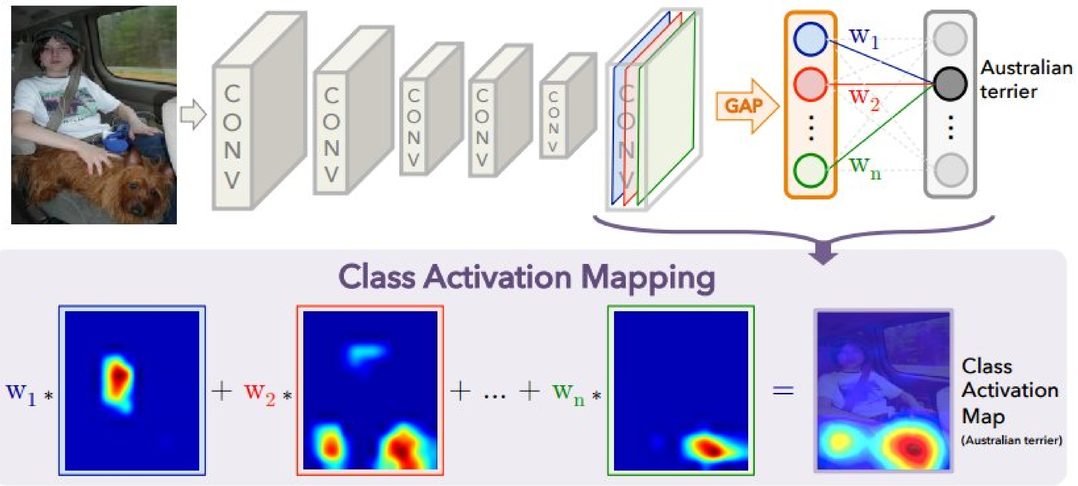
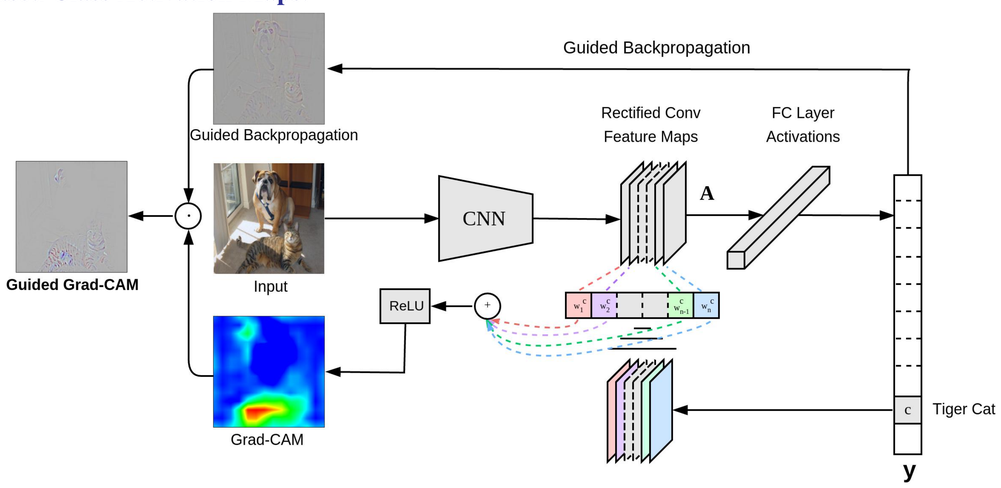
Attention Models

Class Activation Maps:

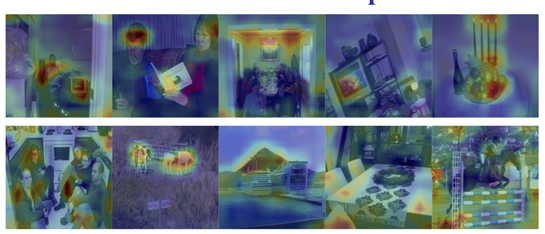


Gradient based Class Activation Maps:

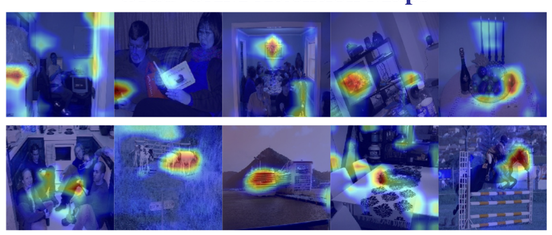


Attention Maps

CAM Attention Maps



Grad-CAM Attention Maps

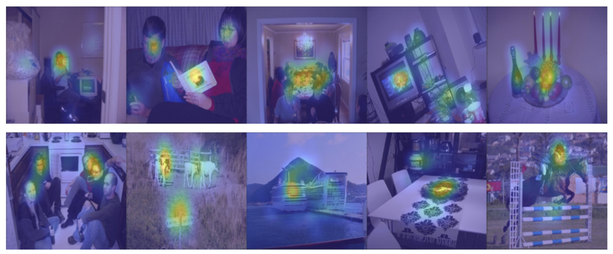


Human Attention: Eye-Tracking Study

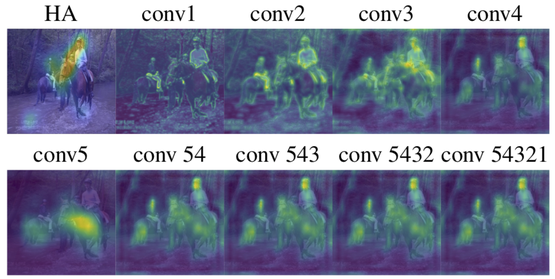
Human attentions that are generated by eye-tracking

- We have recruited 15 participants at UC Merced.
- We have shown them 200 images that have been picked in the VOC 2007 dataset.

Human attentions that are generated by eye-tracking

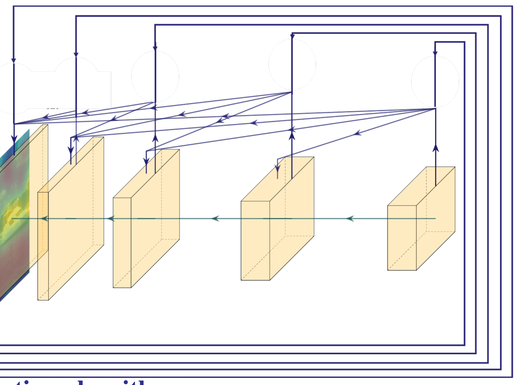


Densely Connected Attention Maps



Method

Densely Connected Attention Maps



Comparing the results of the proposed method with other attention algorithms.