

TEKLRN

TENSORFLOW LEVEL 28

1. Integrated gradients
 - Setup
2. Download a pretrained image classifier from TF-Hub
3. Load and preprocess images with tf.image
4. Classify images
5. Calculate Integrated Gradients
6. Establish a baseline
7. Unpack formulas into code
8. The formula for Integrated Gradients is as follows:
- 9.
10.
$$\text{IntegratedGradients}(x) ::= (x_i - x'_i) \times \int_0^1 \frac{\partial F(x' + \alpha(x - x'))}{\partial x_i} d\alpha$$
11. Interpolate images
12. Compute gradients
13. Visualizing gradient saturation
14. Accumulate gradients (integral approximation)
15. Putting it all together
16. Visualize attributions
17. Uses and limitations