Neural Style Transfer

Cost function

deeplearning.ai

Neural style transfer cost function

Content C

Style S

Generated image G

$$J(G) = \alpha J_{Content}(C, G)$$
$$+ \beta J_{Style}(S, G)$$

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Find the generated image G

1. Initiate G randomly

   G: 100×100×3

   — — — ↑
   RGB

2. Use gradient descent to minimize $J(G)$

   $$G := G - \frac{d}{dG} J(G)$$