Lab Image Colorization

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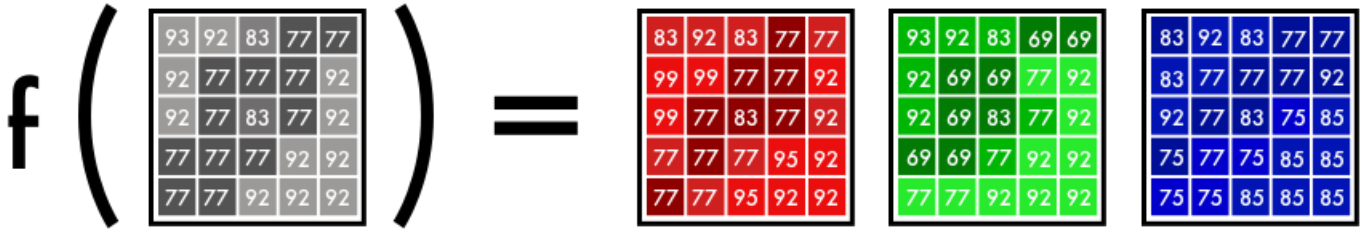
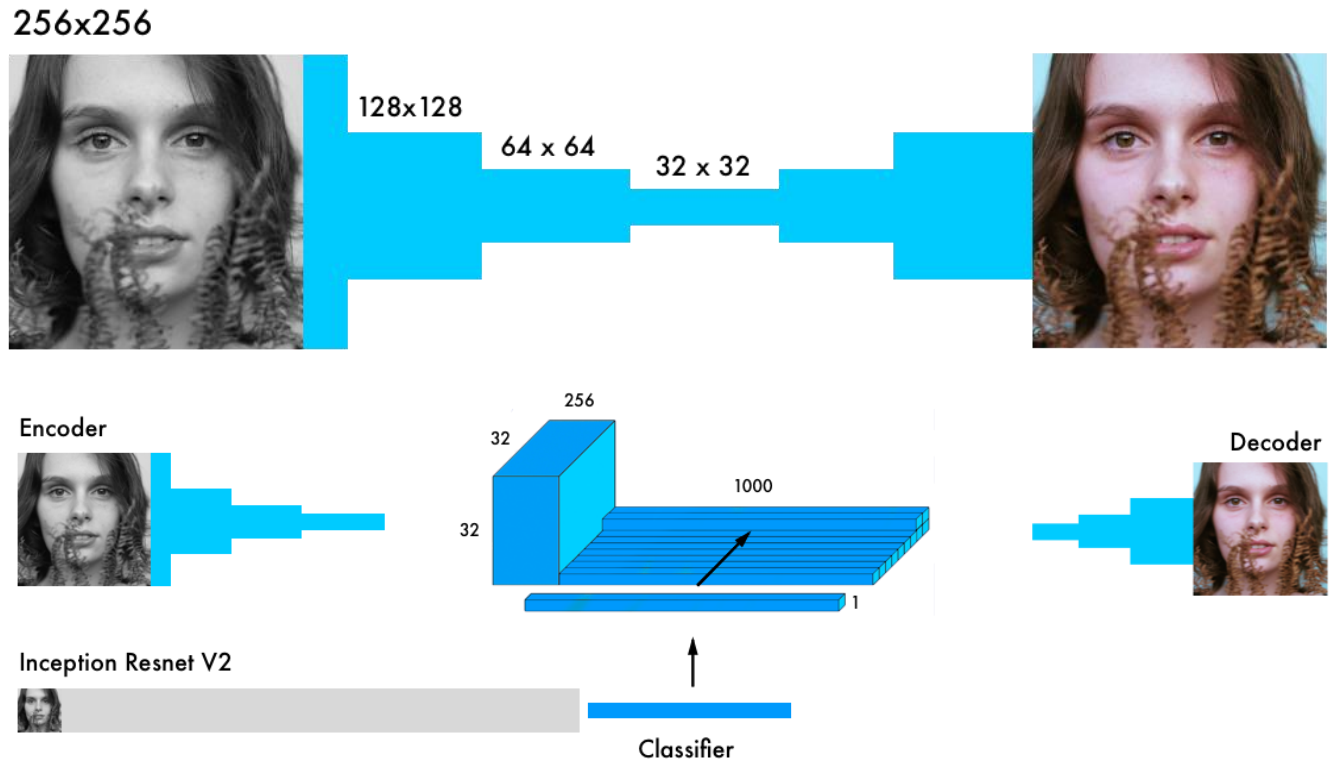
Idea and Previous Solutions



[1]

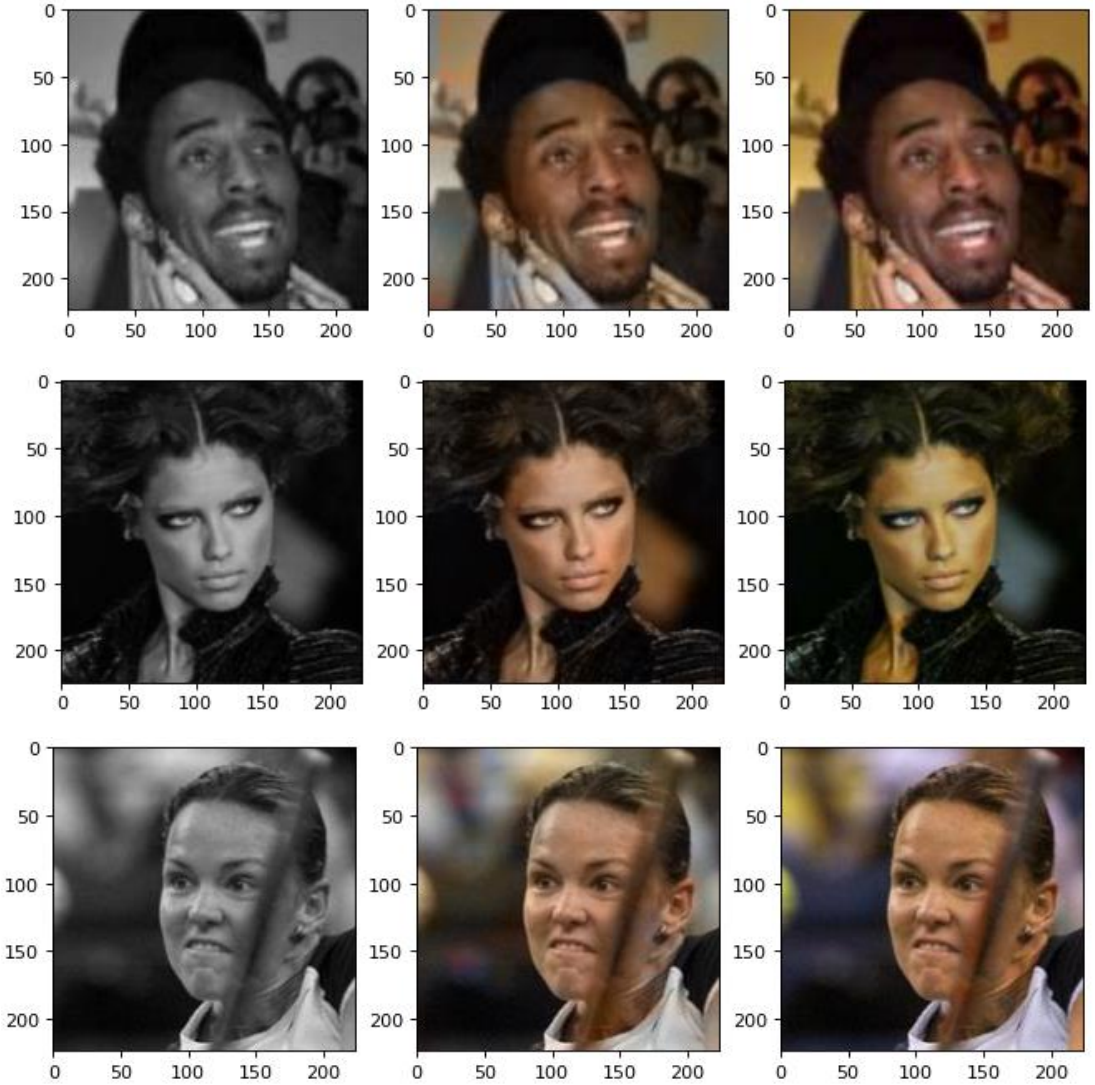
- Simple 2D convolutional autoencoder
- Guiding the neural network by manually adding small dots of color
- Transfer coloring from a similar image
- Using residual encoder and merging classification layers
- Using hypercolumns from classifying network
- Infusing the autoencoder with the outcome of classifying the network

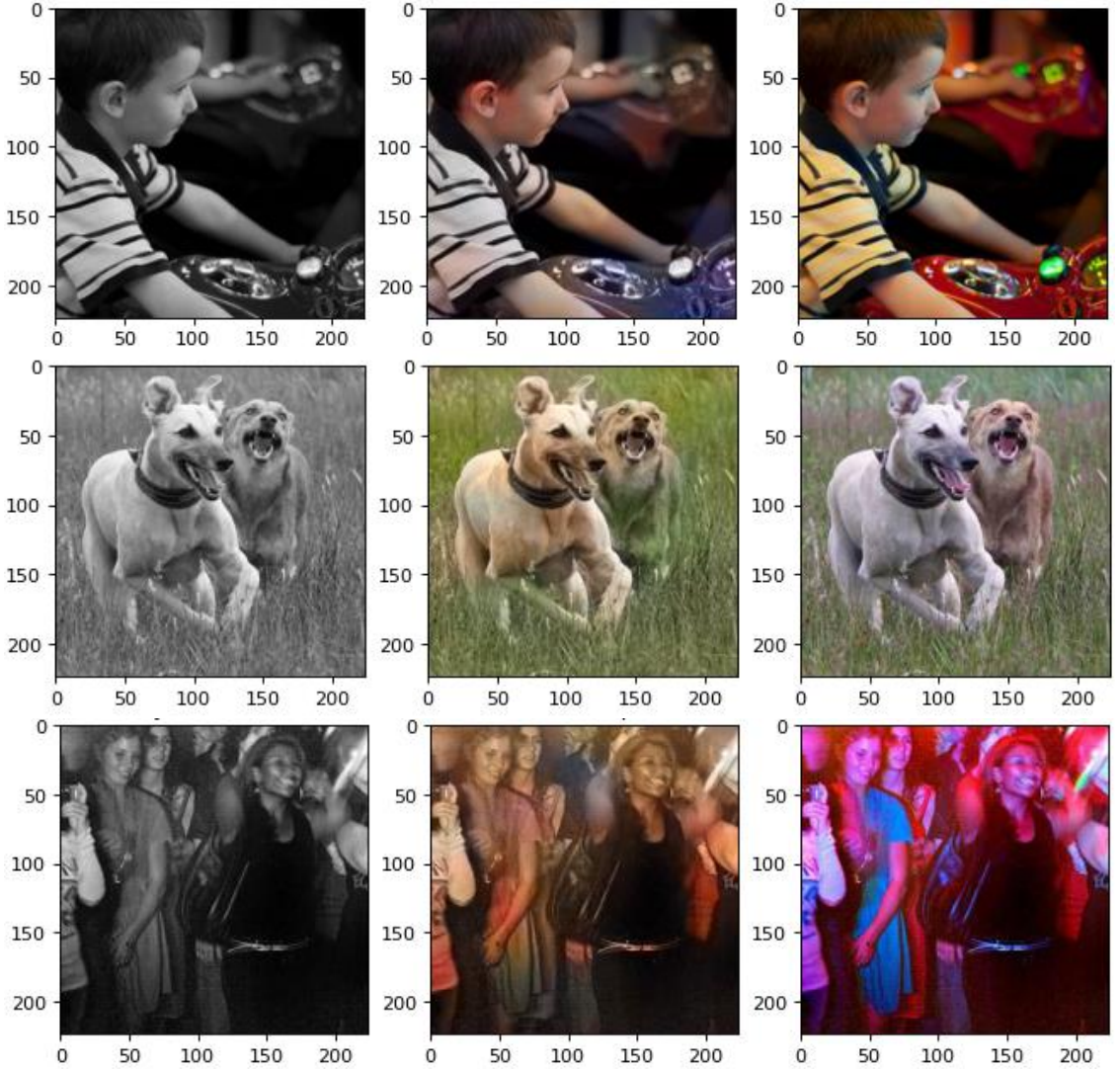
My approach and models



[1]

Results





Coloring old/B&W images

Thank you for your attention

Color space images and model example images obtained from:

[1] Wallner, E. (2021, February 9). *How to colorize black & white photos with just 100 lines of neural network code*. Medium. https://emilwallner.medium.com/colorize-b-w-photos-with-a-100-line-neural-network-53d9b4449f8d