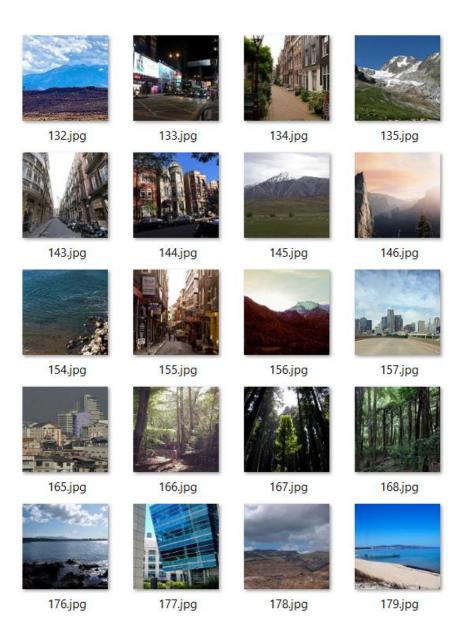
Image Colorization

Al project CSI 4106 Introduction to Artificial Intelligence W2022

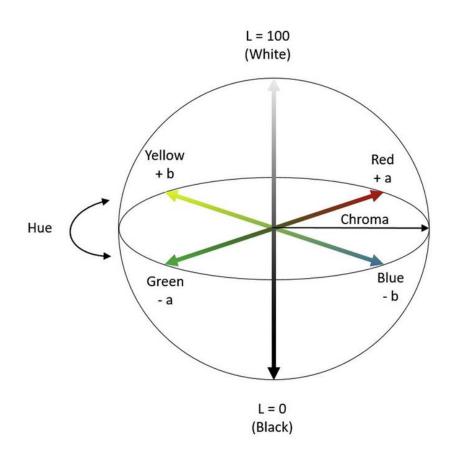
Topics

Coloring grayscale images within LAB color space
Images processing with OpenCV
Deep learning with CNN model with TensorFlow

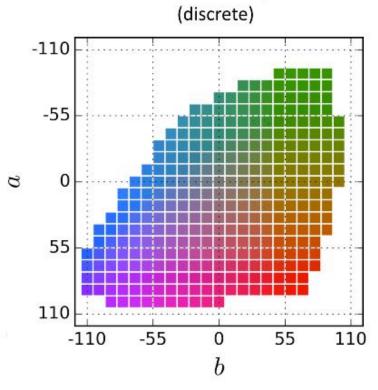
Dataset



LAB color space

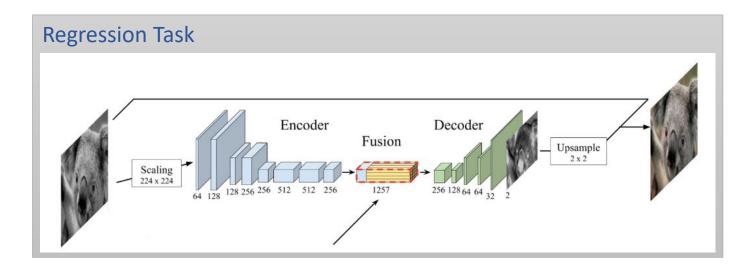


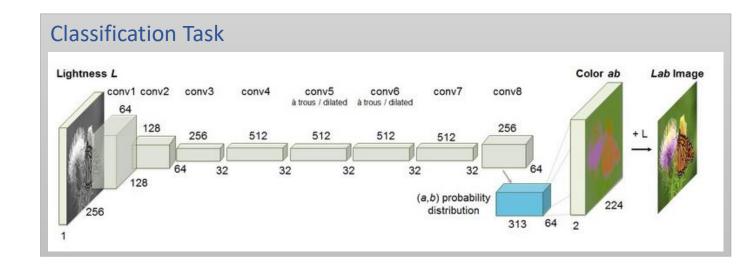
Colors in ab space



• • • • • • • • • • •

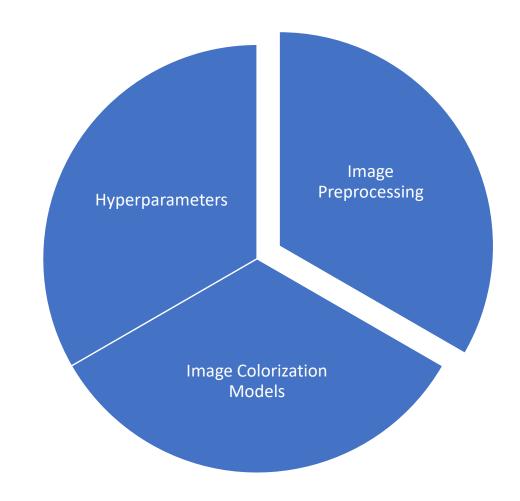
Proposed solution





Coding

See the notebook



RichardZhang LargeKernelRegularizer GRAYSCALE dassic_adam_mse_1 conv_sampling_adam_mae_2 REAL IMAGE SplitLearning_rmsprop basic_rmsprop_mse LargeKernelRegularizer GRAYSCALE conv_sampling_adam_mae_2 RichardZhang REAL IMAGE dassic_adam_mse_1 SplitLearning_rmsprop basic_rmsprop_mse My results REAL IMAGE GRAYSCALE dassic_adam_mse_1 conv_sampling_adam_mae_2 SplitLearning_rmsprop basic_rmsprop_mse RichardZhang LargeKernelRegularizer REAL IMAGE **GRAYSCALE** conv_sampling_adam_mae_2 SplitLearning_rmsprop LargeKernelRegularizer RichardZhang classic_adam_mse_1 basic_rmsprop_mse REAL IMAGE GRAYSCALE conv_sampling_adam_mae_2 dassic adam mse 1 SplitLearning_rmsprop basic_rmsprop_mse RichardZhang LargeKernelRegularizer

conv_sampling_adam_mae_2

SplitLearning_rmsprop

classic_adam_mse_1

RichardZhang

basic_rmsprop_mse

LargeKernelRegularizer

REAL IMAGE

GRAYSCALE