Improve PSNR of Transmitted Images

Peng Xie

using deep learning to increase image resolution

Original Images → Deep Learning → Trained Network → Estimated residual image → Improved Image

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Train Network

- 41 individual layers define the network, these layers include:

- imageInputLayer - the image input layer

- convolution2dLayer - 2D Convolutional Layer for Convolutional Neural Networks

- reluLayer - Rectified Linear Unit (ReLU) layer

- regressionLayer - the regression output layer of the neural network

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Estimated residual image

- Only the luminance channel is processed

- Add the compensated image to the transferred image to get the final image