Unsupervised Real-world Image Super Resolution via Domain-distance Aware Training

Yunxuan Wei\textsuperscript{1,*}, Shuhang Gu\textsuperscript{2,3,*}, Yawei Li\textsuperscript{3}, Radu Timofte\textsuperscript{3}, Longcun Jin\textsuperscript{1}, Hengjie Song\textsuperscript{1}

\textsuperscript{1} South China University of Technology, \textsuperscript{2} The University of Sydney, \textsuperscript{3} ETH Zurich
\{yunxuanwei, sehjsong\}@mail.scut.edu.cn, shuhanggu@gmail.com, \{yaweili, radu.timofte\}@vision.ee.ethz.ch

In this document, we present the network architecture of our patch discriminator and more visual examples of super-resolution results on different datasets, including AIM \cite{37}, RealSR \cite{8} and CameraSR \cite{9}.

1. Network Architecture of our discriminator

![Figure 1: Details of domain-distance discriminator.](image1)

![Figure 2: SR results on AIM \cite{37} dataset.](image2)

![Figure 3: SR results on AIM \cite{37} dataset.](image3)

![Figure 4: SR results on AIM \cite{37} dataset.](image4)

![Figure 5: SR results on AIM \cite{37} dataset.](image5)

![Figure 6: SR results on AIM \cite{37} dataset.](image6)

![Figure 7: SR results on AIM \cite{37} dataset.](image7)

![Figure 8: SR results on RealSR \cite{8} dataset. Note that S.T. ESRGAN is trained with paired data, the remaining methods are unsupervised models.](image8)

![Figure 9: SR results on RealSR \cite{8} dataset. Note that S.T. ESRGAN is trained with paired data, the remaining methods are unsupervised models.](image9)
Figure 10: SR results on RealSR [8] dataset. Note that S.T. ESRGAN is trained with paired data, the remaining methods are unsupervised models.

Figure 11: SR results on RealSR [8] dataset. Note that S.T. ESRGAN is trained with paired data, the remaining methods are unsupervised models.

Figure 12: SR results on RealSR [8] dataset. Note that S.T. ESRGAN is trained with paired data, the remaining methods are unsupervised models.

Figure 13: SR results on RealSR [8] dataset. Note that S.T. ESRGAN is trained with paired data, the remaining methods are unsupervised models.

Figure 14: SR results on CameraSR [9] dataset. Note that S.T. ESRGAN is trained with paired data, the remaining methods are unsupervised models.

Figure 15: SR results on CameraSR [9] dataset. Note that S.T. ESRGAN is trained with paired data, the remaining methods are unsupervised models.

Figure 16: SR results on CameraSR [9] dataset. Note that S.T. ESRGAN is trained with paired data, the remaining methods are unsupervised models.

Figure 17: SR results on CameraSR [9] dataset. Note that S.T. ESRGAN is trained with paired data, the remaining methods are unsupervised models.

Figure 18: SR results on CameraSR [9] dataset. Note that S.T. ESRGAN is trained with paired data, the remaining methods are unsupervised models.