Weihao XIA

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Information E-mail: xiawh16@gmail.com Homepage: xiaweihao.com

Research image translation, image restoration and enhancement, domain adaption,

Interests depth estimation, semantic segmentation.

Education Tsinghua University (THU)

Sept., 2016 - Jul., 2019

Master in Control Engineering. Advisor: Yujiu Yang.

This: Image Restoration and Image Quailty Assessment via Deep Learning.

Sun Yat-Sen University (SYSU)

Sept., 2012 - Jul., 2016

Bachelor in Automation, School of Information Science and Technology.

Preprints

Weihao Xia, Yujiu Yang. Image Restoration via Segmentation Refinement. [PDF] [Project] Weihao Xia, Yujiu Yang, Jing-Hao Xue, Jing Xiao. Domain-Aware No-Reference Image Qual-

ity Assessment. [PDF] [Project]

Weihao Xia, Yujiu Yang, Jing-Hao Xue. Cali-Sketch: Stroke Calibration and Completion for High-Quality Face Image Generation from Poorly-Drawn Sketches. [PDF] [Project] Weihao Xia, Yujiu Yang, Jing-Hao Xue. Unsupervised Multi-Domain Multimodal Image-to-

Image Translation with Explicit Domain-Constrained Disentanglement. [PDF] [Project]

Publications

Weihao Xia. Image Restoration and Image Quailty Assessment via Deep Learning. Thesis Submitted to Tsinghua University in partial fulfillment of the requirement for the professional degree of Master of Engineering. May 2019.

Weihao Xia, Yujiu Yang, Xianyu Bao. ECGAN: Image Translation with Multi-scale Relativistic Average Discriminator[C]. 8th International Conference on Artificial Intelligence and Mobile Services (Best Student Paper Awards), 2019, pp. 28–38.

Weihao Xia, Chengxi Yang, Yujiu Yang, Wenxiu Sun. Matching Low-Quality Photo to DSLR-Quality with Deep Convolutional Networks[C]. 7th International Conference on Artificial Intelligence and Mobile Services, 2018, pp. 43–54.

Experiences

Tsinghua Shenzhen International Graduate School (SIGS) Jun., 2019 - Aug., 2019 Research Assistant

 \circ research and implementation on image-to-image translation, restoration and enhancement, domain adaption.

AR/VR Engineering Department, 2012 Labs, Huawei

Jun., 2018 - Sep., 2018

Algorithm Engineer

o implement a semantic segmentation algorithm using TensorFlow multi-GPU training.

o investigate and implement current methods to improve layout estimation algorithm.

o design a Camera-IMU framework for depth estimation as the front of AR applications.

SenseTime Group Limited

Oct. 2017 - Mar., 2018

R&D Intern

o design and implement a novel inverse tone mapping and bracketed image HDR merging method.

• improve a image enhancement algorithm using deep learning.

Skills English: CET-6 Libs: PyTorch, TensorFlow, MXNet

Programming: Python, Matlab, C/C++, Java Tools: Linux Shell, Markdown, Bash