Weihao Xia

3D Vision Engineer
Huawei Technologies Co., Ltd.

Email: xiawh3@outlook.com
Github: github.com/xiaweihao
Homepage: xiaweihao.com

Education

Tsinghua University (THU)   **Sept., 2016 - Jul., 2019**
M. Sc. in Control Engineering, School of Information Science and Technology.

Sun Yat-Sen University (SYSU)   **Sept., 2012 - Jul., 2016**
B. Sc. in Automation, School of Information Science and Technology.

Professional Experience

Research Assistant, Tsinghua University   **Jun., 2019 - Oct., 2019**
Advisor: *Prof. Dr. Yujiu Yang*
Project: **Research on Image Translation, Restoration and Enhancement**

Teaching Assistant, Tsinghua University   **Oct. 2017 - Feb., 2018**
Course: **Selected Topics on Intelligent Information Processing**, Fall 2017

Work Experience

3D Vision Vision Algorithm Engineer, HUAWEI   **Oct., 2019 - Now**
Project: **Clothed People Digitalization**
Project: **Temporal and Scale Consistent Depth Estimation On Mobile Devices**
Project: **Smartphone AR Occlusion in static and dynamic scenes using a single RGB Camera**

Engineer Intern, 2012 Labs, HUAWEI   **Jun., 2018 - Sep., 2018**
Advisor: *Dr. Wensen Feng*

R&D Intern, SenseTime Group Limited   **Oct. 2017 - Mar., 2018**
Advisor: *Dr. Wenxiu Sun*
Project: **Image Enhancement using Misaligned Training Data**

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.

Preprints

Weihao Xia, Yujiu Yang, Jing-Hao Xue. **Controllable Continuous Gaze Redirection.** [PDF] [Code] Apr. 2020.

Weihao Xia, Zhanglin Cheng, Yujiu Yang. **Cooperative Image Segmentation and Restoration in Adverse Environmental Conditions.** [PDF] [Project] [Code] Aug. 2019.

Weihao Xia, Yujiu Yang, Jing-Hao Xue, Jing Xiao. **Domain-Aware No-Reference Image Quality Assessment.** [PDF] [Project] Jun. 2019.

Weihao Xia, Yujiu Yang, Jing-Hao Xue. **Domain-Supervised Image-to-Image Translation.** [PDF] [Project] Apr. 2019.

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] Mar. 2019.

Skills

Language: Chinese Mandarin (native), English (fluent)

Framework: PyTorch, TensorFlow, MindScope

Programming: Python, C/C++, Matlab , with practical experiences.

Professional Services

Reviewer: Neurocomputing, IEEE Transactions on Multimedia

Last updated: April 4, 2020