Dhvanil Patel
COMP 4270
Computer Graphics 1
03/21/2018

Literature Review

Deep Reverse Tone Mapping

In this paper, they generate models for 2D images which can generate a realistic image of relatively large size, it is still difficult for this approach to generate multiple images that are consistent with each other from input natural images of tens of thousands of pixels or more. They used the three LDR images with different exposures and the HDR image as training data for the generative neural network model. Most of the existing methods are limited because they rely on specific assumptions or heuristics; the alternative approach utilizes reference images to cope with loss of data, but it requires user markups and reference images of very similar scenes. This approach is simple and can be easily realized by using current generative LDR images with different exposures Output HDR images (tone mapped) Ground-truth HDR (tone mapped) Fig. However, in our preliminary experiment this approach often failed to generate high-quality images because noise and artifacts in the output accumulate with repeated deconvolution. Although they have demonstrated the effectiveness of our approach compared to existing rTMOs, its expressive power is still limited due to the rather small dataset, containing small variations, compared to the variations in conventional tasks, for example, image classification. Every time the deconvolution is applied, an image with increased (or decreased) exposure is obtained. Artifacts of repeated patterns caused by using adversarial loss. Failed results of directly inferring an HDR image from a single LDR image. One possible approach is to repeatedly apply 2D deconvolution to the encoded features of a previous output. From left to right, the input LDR image; the down exposed LDR image, and the up-exposed LDR image. Input image Down exposed image Unexposed Image Fig. We also tried the adversarial loss function for various networks. A better approach would be to synthesize new contents on a local patch basis while accounting for the global context of the scene. Another approach is to incorporate recurrent structures such as long short-term memories (LSTMs).

PROGRESSIVE TONE MAPPING OF BRAIN IMAGES AT SINGLE-NEURON RESOLUTION

In this paper, they presented a progressive tone mapping method for slice of the whole 3D brain image at single-neuron resolution, the tone mapping steps in the global mode are set as the results of different tone mapping methods. The proposed method in the local mode are also included, besides method introduces overexposure that conceals the detailed structure. The proposed method in the local mode best preserves the local contrast, by further suppressing the overexposure compared with the global mode, as the tone mapping steps are adaptively determined tone mapping methods. The proposed method in the local mode are also included, besides method introduces overexposure that conceals the detailed structure the proposed method in the local mode best preserves the local contrast, by further suppressing the overexposure compared with the global mode, as the tone mapping steps are adaptively determined tone mapping methods. The overexposure and underexposure rates of the whole 3D image, with Durand's method, our proposed progressive tone mapping. The overexposure and underexposure rates of the whole 3D image, with Durand's method, our proposed progressive tone mapping. In the first mode, a unified step N are used for all the blocks to produce a globally consistent visual experience, which is preferred when the observer would like to preview the whole brain image and quickly switch between various parts of the brain.

In this both article, they are talking about different tone mapping methods. On first article, they are stating that it is difficult to generate multiple images that are consistent with each other from input natural images of tens of thousands of pixels or more. On other side, in second paper they pretended tone mapping method for whole 3D brain image at single neuron resolution. They proposed two modes: local and global. They presented a 2D convolution- and 3D deconvolution-based neural network architecture with skip connections for generating over- and underexposed images

1)

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@article{endo_kanamori_mitani_2017,
title={Deep reverse tone mapping},
 volume={36}, DOI={10.1145/3130800.3130834},
number={6},
journal={ACM Transactions on Graphics},
author={Endo, Yuki and Kanamori, Yoshihiro and Mitani, Jun},
year={2017},
pages={1–10}}
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2)

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@INPROCEEDINGS{8309102,
author={P. Zhao and Z. Xiong and D. Liu and H. Wang and C. Yang and L. Ding and W. Ding and Z. J. Zha and G. Bi and F. Wu},
booktitle={2017 IEEE Global Conference on Signal and Information Processing (GlobalSIP)},
title={Progressive tone mapping of brain images at single-neuron resolution},
year={2017},
```

volume={},
number={},
pages={958-961},
keywords={Brain;Dynamic range;Image coding;Image resolution;Neurons;Three-dimensional displays;Visualization;High dynamic range;bilateral filtering;brain image;neuron;tone mapping},
doi={10.1109/GlobalSIP.2017.8309102},
ISSN={},
month={Nov},}