VISUAL COMPUTING WS 2022 / 2023

Burst Images

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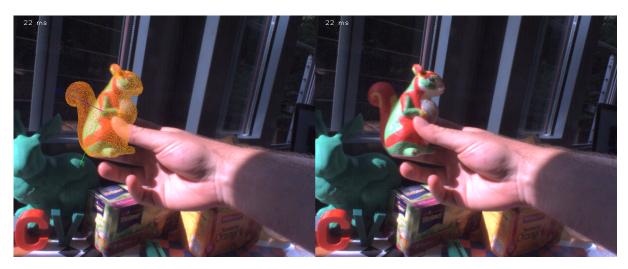


Figure 1: Best teaser image you can provide . . .

Abstract

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1. Introduction

Burst photography is a technique in which a series of photographs is taken quickly in succession. This can be useful in a variety of situations, such as capturing action or movement, or to create a sense of motion. In digital photography, burst images are stored as a sequence of image files, typically in a format such as JPEG or RAW.

High Dynamic Range (HDR) is a technique used to improve the dynamic range of an image, which is the range of luminance or brightness levels that can be captured in a photograph. The dynamic range of a scene can often be greater than what a camera is able to capture in a single image, resulting in lost detail in the highlights

or shadows. HDR techniques can be used to extend the range of luminance in an image, resulting in more detail and a more realistic representation of the scene.

One way that burst photography and HDR techniques can be used together in mobile cameras is to capture a series of photographs with different exposures in a burst, and then combine the exposures into a single HDR image using software. This can be particularly useful in low-light situations, where the camera may struggle to capture a wide range of luminance levels in a single exposure. By capturing multiple exposures and combining them into an HDR image, it is possible to extend the dynamic range and capture more detail in both the highlights and shadows.

[HSG*16]

2. Related Work

Maybe a separate section about related work ... Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut portitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

3. Approach

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4. Experiments

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5. Conclusions

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6. Acknowledgements

Maybe you like to acknowledge ...

References

[HSG*16] HASINOFF S. W., SHARLET D., GEISS R., ADAMS A., BARRON J. T., KAINZ F., CHEN J., LEVOY M.: Burst photography for high dynamic range and low-light imaging on mobile cameras. ACM Transactions on Graphics (Proc. SIGGRAPH Asia) 35, 6 (2016).