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## Deep-Learning Approaches for High Dynamic Range Sensing and Imaging

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### Message from the Guest Editors

We are experiencing a large use of HDR technology in the entertainment sector, and are also starting to see its use in industrial applications. On the other hand, we are assisting in a paradigm change in the image-processing area, where traditional techniques are surpassed by more flexible deep-learning-based approaches. In the last few years, we are also observing this specific trend in the HDR imaging field. This has brought a number of challenges that need to be addressed in order to make deep-learning-based HDR approaches more robust and resilient to unseen data and/or data which is too noisy.

Topics included but not limited to

Deep-learning-based techniques for images/videos for:

- High dynamic range (i.e., camera, image and vision, sensors);
- Single/multi-exposure HDR content acquisition;
- Image fusion for HDR content;
- HDR formats and standardization;
- HDR objective metrics;
- HDR de-ghosting artifacts removal;
- Tone mapping/inverse tone mapping;
- Color correction for HDR content;
- Gamut adjustment for HDR content;
- Real-time HDR applications;
- Mixed reality for HDR;
- Image-based lighting.

Deadline for manuscript  
submissions:

**closed (10 May 2021)**



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# Special Issue



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## Message from the Editor-in-Chief

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