



Multimedia Tools and Applications

<https://springer.com/11042>

Editor-in-Chief: Borko Furht

Call for Papers

Special Issue on

“Depth-Related Processing and Applications in
Visual Systems” [1190]

The human visual system can not only perceive appearance information such as the color and texture, but also capture depth information of the scene and form stereo perception. Inspired by the human visual system, depth sensing has become one of the core components of many computer vision tasks, such as 3D scene reconstruction, virtual reality, gesture recognition, scene understanding, and automatic drive. With the rapid development of depth imaging technologies and hardware devices, the acquisition of depth information has become more convenient and even some smartphones are equipped with depth sensors. Although depth information enables machines to comprehensively understand the objective world, it also brings some new problems and challenges in depth-related processing and applications. In this special issue, the goal is to publish original research papers related to the models and algorithms for depth processing together with widespread applications.

Topics of interest include, but are not limited to:

- Depth estimation from single image/stereo image/light field image/video
- Depth image enhancement, such as hole-filling, denoising, completion
- Depth image/video super-resolution
- Depth/Disparity adjustment and registration
- Depth image quality assessment
- Depth image/video coding and compression
- Depth assisted low-level visual applications, including image/video editing, inpainting, stitching, retargeting, matching, 3D reconstruction, semantic segmentation, etc.
- Depth assisted high-level visual applications, including object detection, recognition, tracking, retrieval, classification, scene understanding, etc.

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Important Dates

Submission deadline: 01 November, 2020

Final manuscript due: 01 March, 2021

Tentative publication date: 01 July, 2021

Submission Guidelines

Authors should prepare their manuscript according to the Instructions for Authors available from the Multimedia Tools and Applications [website](#). Authors should submit through the online submission site at <https://www.editorialmanager.com/mtap/default.aspx> and select “**SI 1190 - Depth-Related Processing and Applications in Visual Systems**” when they reach the “Article Type” step in the submission process. Submitted papers should present original, unpublished work, relevant to one of the topics of the special issue. All submitted papers will be evaluated on the basis of relevance, significance of contribution, technical quality, scholarship, and quality of presentation, by at least three independent reviewers. It is the policy of the journal that no submission, or substantially overlapping submission, be published or be under review at another journal or conference at any time during the review process.

The special issue will consider papers extending previously published conference papers, provided the journal submission presents a significant contribution beyond the conference paper. Authors must explain in the introduction to the paper the new contribution to the field made by the submission, and the original conference publication should be cited in the text. Note that neither verbatim transfer of large parts of the conference paper nor wholesale reproduction of already published figures is acceptable.