Special Issue

Image Processing and Computer Vision: Data-Driven Environment Perception and 3D Reconstruction

Message from the Guest Editors

This Special Issue, "Image Processing and Computer Vision: Data-Driven Environment Perception and 3D Reconstruction", focuses on the latest advancements in image processing and computer vision technologies for data-driven environment perception and 3D reconstruction. The papers included cover a wide range of topics, including deep learning approaches for image processing, object detection and recognition, semantic segmentation, and scene understanding. Additionally, the Special Issue features research on 3D reconstruction techniques, such as point cloud processing, differentiable rendering, stereo vision, and simultaneous localization and mapping (SLAM). It also delves into the emerging field of AI-generated content (AIGC). The papers explore the use of AI algorithms to create and manipulate visual content, such as generating realistic images, videos, and 3D models. The Special Issue explores the practical applications of these technologies in fields such as autonomous vehicles, robotics, embodied AI, remote sensing and photogrammetry, augmented reality, and virtual reality.

Guest Editors

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Deadline for manuscript submissions

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Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

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