Special Issue

Advancements in Deep Image Restoration and Understanding of Low-Quality Images: Technologies and Applications in Sensing Systems

Message from the Guest Editors

Deep image restoration and understanding play a crucial role in enhancing the performance of modern sensing systems by improving the quality and interpretability of visual data captured by various sensors. The increasing deployment of imaging sensors in applications such as medical diagnostics, environmental monitoring, autonomous systems, and security has underscored the importance of restoring degraded images and extracting meaningful information under challenging conditions. Advancements in deep learning technologies have significantly transformed this field, enabling the development of robust methods that address noise, blur, low resolution, and other distortions inherent to sensor-captured images. Of particular interest is the integration of deep neural networks with sensor data. This Special Issue aims to highlight cutting-edge research in deep image restoration and understanding within the context of sensing technologies. We invite contributions that explore innovative deep learning methodologies, theoretical advancements, and practical applications, particularly in sensor-driven fields such as medical imaging, remote sensing, smart cities, and autonomous systems.

Guest Editors

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Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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