Special Issue

Navigation and Object Recognition with 3D Point Clouds

Message from the Guest Editors

A 3D point cloud is a 3D coordinate point arranged in a regular grid, which is usually generated by a 3D scanner or photogrammetry software, that can represent a 3D shape or object. It is generally used for visualization, animation, rendering, and mass customization applications. In the processes of UAV remote sensing image monitoring and automatic driving, high-resolution positioning and the identification of objects are required to obtain more information. Three-dimensional point cloud technology can accurately measure the position and shape of objects in three-dimensional space, which has become a hot topic in recent years. There are five steps: namely, the collection point cloud data, feature extraction, segmentation, classification, and visualization. The processing of 3D data is more complex, so many studies will also use hybrid algorithms combined with this technology. This Special Issue aims to study object positioning and recognition based on 3D point clouds, focusing on applications and not being limited to a particular field. Authors are encouraged to submit relevant research articles or review articles on the above-mentioned topics.

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Deadline for manuscript submissions

closed (20 June 2024)

About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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