Special Issue

Application of Machine Learning to Image Classification and Image Segmentation

Message from the Guest Editor

Image classification and image segmentation are two important tasks in the field of computer vision. Image classification aims to distinguish different categories of targets based on the different features reflected in the image information. It uses computers to quantitatively analyze images, categorizing each pixel or region in the image into one of several categories. Image segmentation refers to the process of subdividing a digital image into multiple image subregions that have certain similarities in features, while there are significant differences between different subregions. The goal of image segmentation is to assign a category label to each pixel in the image, achieving a fine understanding of the image. In recent decades, deep learning techniques have made unprecedented advancements in both image classification and image segmentation. Despite promising performance with existing methods, they are still challenged with numerous open issues. This organized Special Issue endeavors to show the new developments in both image classification and image segmentation to highlight future research.

Guest Editor

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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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