Survey on Segmentation techniques

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1 Abstract

As computer vision becoming increasingly widely used in all kinds of fields, segmentation which is a important subject in this field also is a main hotspot draws many scholars' attention. And lots of solution to this problem is popping out.

2 Introduction

Segmentation is a method to extract or separate different part of an image or divide an image into constituent parts. There are 3 main types of segmentation: general segmentation refers to just separate pixels of different objects. Semantic segmentation gives semantic class to each region. Instance segmentation labels each object. And recently a novel and important research topic named panoptic segmentation appeared. It's main task is to give each pixel a semantic label and instance ID. Panoptic segmentation integrates semantic segmentation and instance segmentation in a sense, or it adds process on background compare with instance segmentation.

Top-level conferences and journals in Semantic segmentation or CV CVPR, ICCV, ECCV, Neurips, ICML, ICLR, AAAI, IJCAI.