Object Detection through CNN with Deep Learning

Volume 176 - Number 15

Year of Publication: 2020

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Abstract

Object detection from images and videos is the main point in the applications of artificial intelligence and computer vision like self-driving cars, robotics etc. In this paper, we have proposed a way to detect the objects in images and videos by a new pre-training strategy through convolutional neural network with deep learning. We are using the reLU, pooling and fully connected layer methods to increase the accuracy in detecting the objects and the number of detecting objects has increased. We have used coco database in which it has different types of object names with its threshold which are highly used for detecting the objects. We have used 3 different ways of input for detecting the objects which are images, videos and live camera. The algorithm used is regression. We have used YOLO v3 which uses the single neural network and divides the image into regions and predicts the objects.

References
1. The Object Detection Based on Deep Learning Cong Tang, Yunsong Feng, Xing Yang, Chao Zheng, Yuanpu Zhou.


**Index Terms**

Computer Science  
Artificial Intelligence

**Keywords**

Deep Learning