17/14 June '22

Topic: YOLOV6-v3.0 – A full scale Reloading

Abstract:

The YOLO community has been in high spirits since our first two releases. By the advent of Chinese New Year 2023, which sus the Year of the Rabbit, we refuenish YOLOv6 with numerous novel enthusiasts enhancements on the network architecture and the training scheme. This release is identified as YOLOv6-v3.0 for a glimpse of performance, our YOLOv6-N hits 37.5% AP on the coco dataset at a throughput of 1187 FPS tested with a NVIDIA Tesla T4 GPU. YOLOv6-S strikes 45.0% AP at 484 FPS, outperforming other main stream detectors at the same scale. whereas YOLOv6-M/L also achieves better accuracy performance than other detectors at a similar accuracy infuence speed. Additionally, with an extended backbone and neck design, our YOLOv6-L6 achieves the state-of-the art accuracy in real time. Extensive experiments are carefully conducted to validate the effectiveness of each improving component.

Conclusion

In this report YOLOv6 is upgraded on aspects of the network design and training strategy which boost YOLOv6 to achieve the state of the out

accuracy for real time object detection. In the future, the persistently work on the optimization of YOLOv6 to render an application friendly detection framework as one research continuous and the technique in object detection advance.