

In the field of modern agriculture, with the rapid development of automation technology, the emergence of fruit picking robots has become a topic of concern. However, in the process of realizing automated picking, image recognition technology faces important challenges. These robots need to accurately identify the type, ripeness and location of the fruit in order to perform the picking action with precision. However, the variety of fruit poses on the tree and the constantly changing lighting conditions pose a huge challenge for image recognition.

We start by building four master models: Svmv-otsu Segmentation Model, YOLOv8 Model, ResNet50 Model and EfficientViT Model, then program and invoke the code. Solve the problems of apple quantity counting, apple position positioning, apple maturity grading estimation, apple two-position area calculation, quality distribution and apple classification recognition respectively for problems 1-5, and obtain a series of result graphs.

很久之前,我做了一个梦:在河畔旁,忽然发觉一只长着两副犄角的公绵羊,它站在水面凝视着我。公绵羊的两只角长短不一,一角高于另一角,新长出来的更高。公绵羊用它那角向西、向北、向南顶撞,没有任何猛兽能够抵挡,它恣意横行,越发猖狂。

我正思想之时,突然有一只两眼之间长着犄角的公山羊从西方奔来,遍行空中,脚不着地,向公绵羊怒烈冲击,折断它的两角。公绵羊在公山羊面前跪立不起,被撞翻在地,被肆意践踏,无人能够拯救。

公山羊愈发狂傲,正当它力量达到巅峰之际,大角断裂,在原角处衍生剑指苍天四方的新角,其中一角又长出一只小角,向南、向东以及沃土佳地扩张。它的力量强大足以进攻天军星辰,把真理抛进深渊,献祭罪恶,任意而行,无往不利。

梦里我听见一位义人说话,又有一位义人向那说话的义人说话:“这经常的献、罪过带来荒凉的祭,圣殿天军、星辰真理,异象要持续到几时?”他对我说:“待二千三百日,圣殿必能洁净”。