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An Improved Mask R-CNN Method for Weed Segmentation)

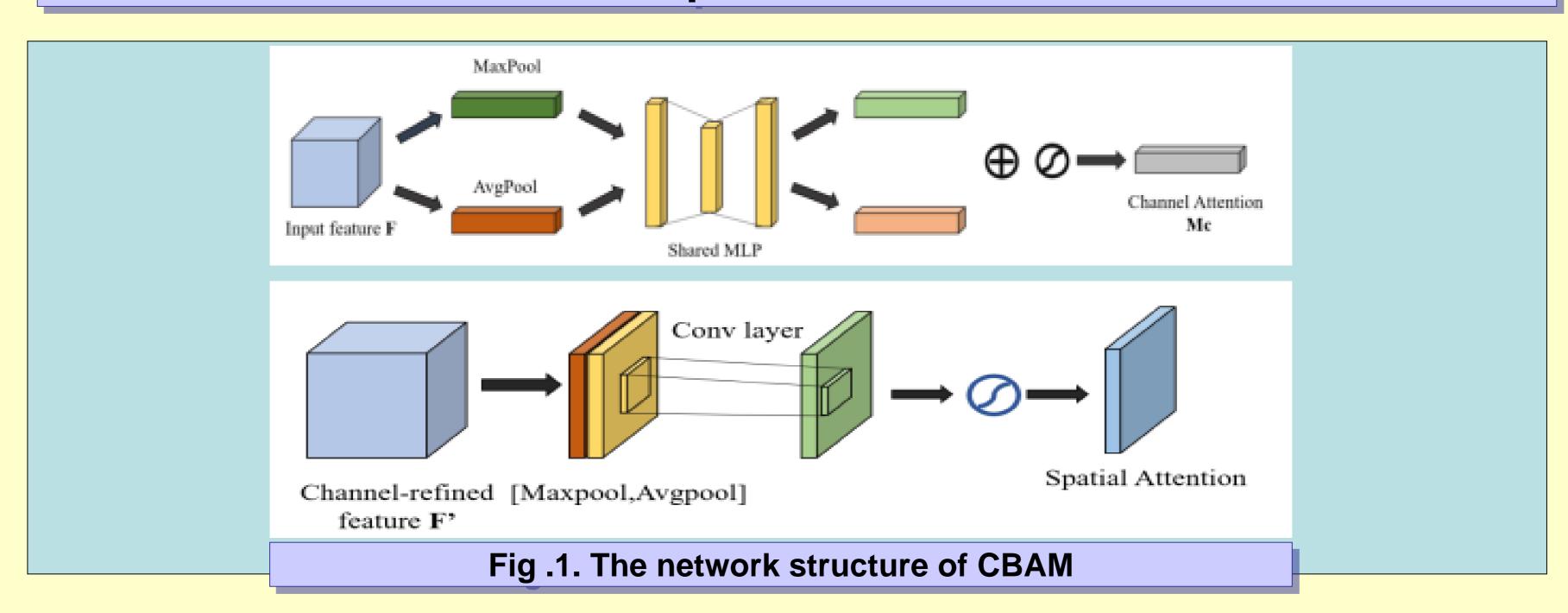
Shangzhu Jin, Haojun Dai, Jun Peng etc.

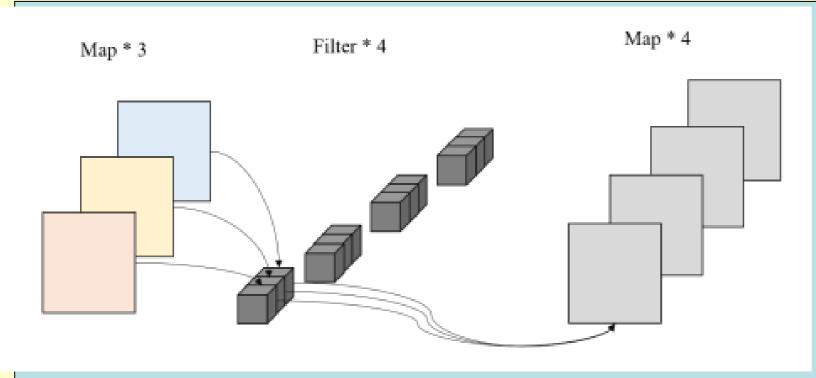
Chongqing University of Science and Technology

1 Introduction

In order to solve the problem of low precision of weed identification and segmentation in complex field environment, a weed segmentation and recognition method based on improved Mask R-CNN model was proposed

2 Proposed Methods





Concat

Fig .2 Pointwise convolution operation

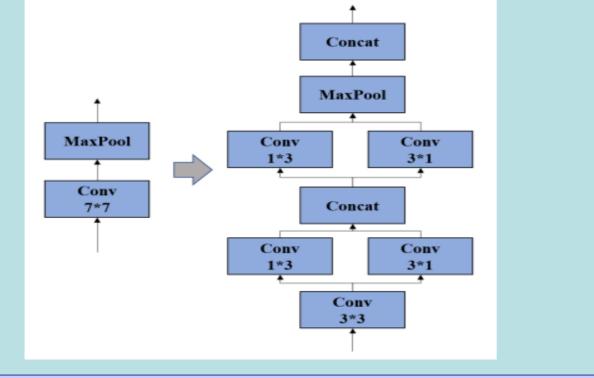
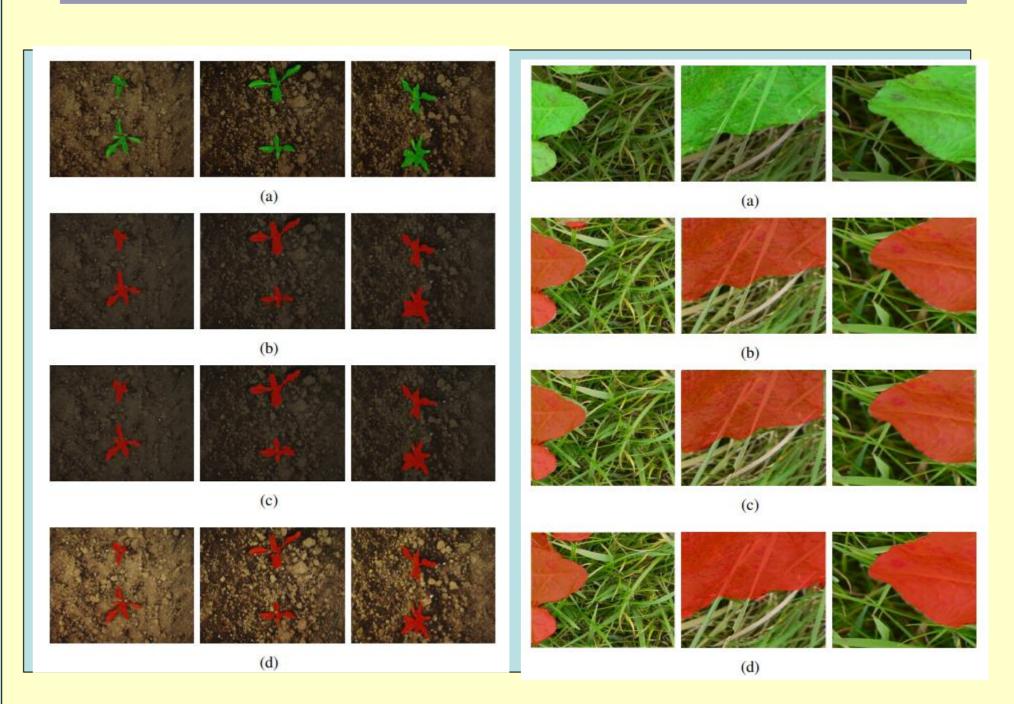


Fig .3. Improved input stream module

3 Experiments



Summary

The improved Mask R-CNN segmentation model has high accuracy in weed segmentation and recognition, meets the basic requirements of accurate weed identification and segmentation, and has certain advantages in running speed.