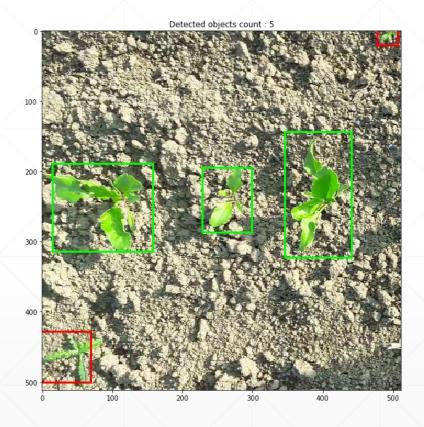


YOLO实战

主讲: 龙良曲

Plant Detector

- Sugarbeet 甜菜
- Weed 杂草



Pipeline

Load Dataset

- Parse annotation
- Create Dataset
- Visualize Dataset
- DataAugmentation

Compose Labels

- Label for single image
- Labels for batch
- Visualize mask

Model

- DartNet
- Initialization

Loss Function

- Coordinate loss
- Class loss
- Compute IOU
- Confidence loss

Train and Visualize

- Train
- Visualize



后退,我要开始装逼了

Step 1.Load Dataset

Load Dataset

- Parse annotation
- Create Dataset
- Visualize Dataset
- DataAugmentation

Step 2.Compose Labels

Compose Labels

- Label for single image
- Labels for batchVisualize mask

Step 3.Model



- DartNetInitialization

Dartnet-19

Filters	Size/Stride	Output
32	3×3	224×224
	$2 \times 2/2$	112×112
64	3×3	112×112
	$2 \times 2/2$	56×56
128	3×3	56×56
64	1×1	56×56
128	3×3	56×56
	$2 \times 2/2$	28×28
256	3×3	28×28
128	1×1	28×28
256	3×3	28×28
	$2 \times 2/2$	14×14
512	3×3	14×14
256	1×1	14×14
512	3×3	14×14
256	1×1	14×14
512	3×3	14×14
	$2 \times 2/2$	7×7
1024	3×3	7×7
512	1×1	7×7
1024	3×3	7×7
512	1×1	7×7
1024	3×3	7×7
1000	1×1	7×7
	Global	1000
	32 64 128 64 128 256 128 256 512 256 512 256 512 256 512 1024 512 1024 512 1024	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Step 4.Loss Function

Loss Function

- Coordinate loss
- Class loss
- Compute IOUConfidence loss

Step 5. Train and Visualize



- TrainVisualize

Acknowledgement

- https://www.jeremyjordan.me/semantic-segmentation/
- https://divamgupta.com/imagesegmentation/2019/06/06/deep-learning-semanticsegmentation-keras.html

下一课时

Thank You.