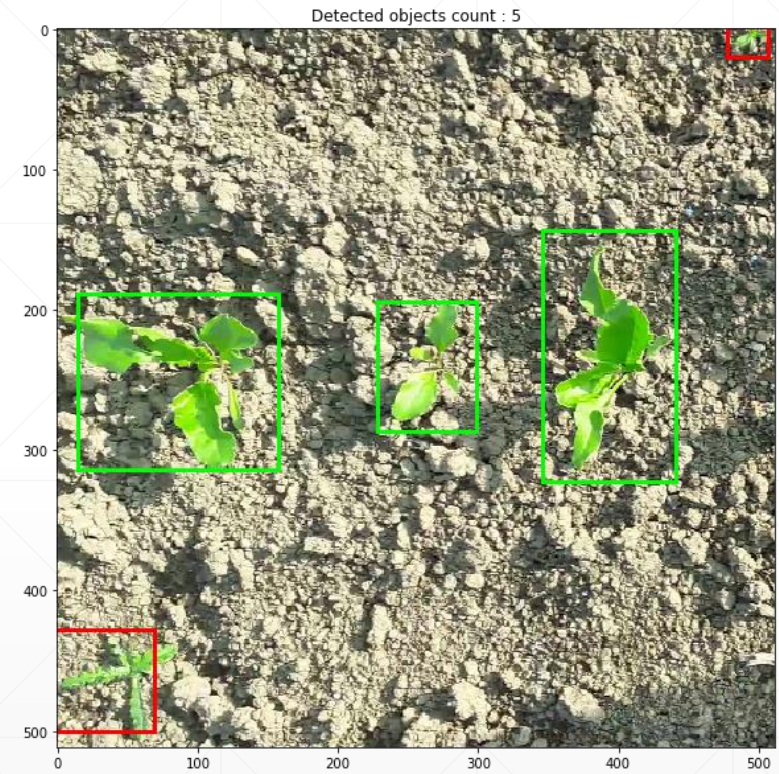


YOLO实战

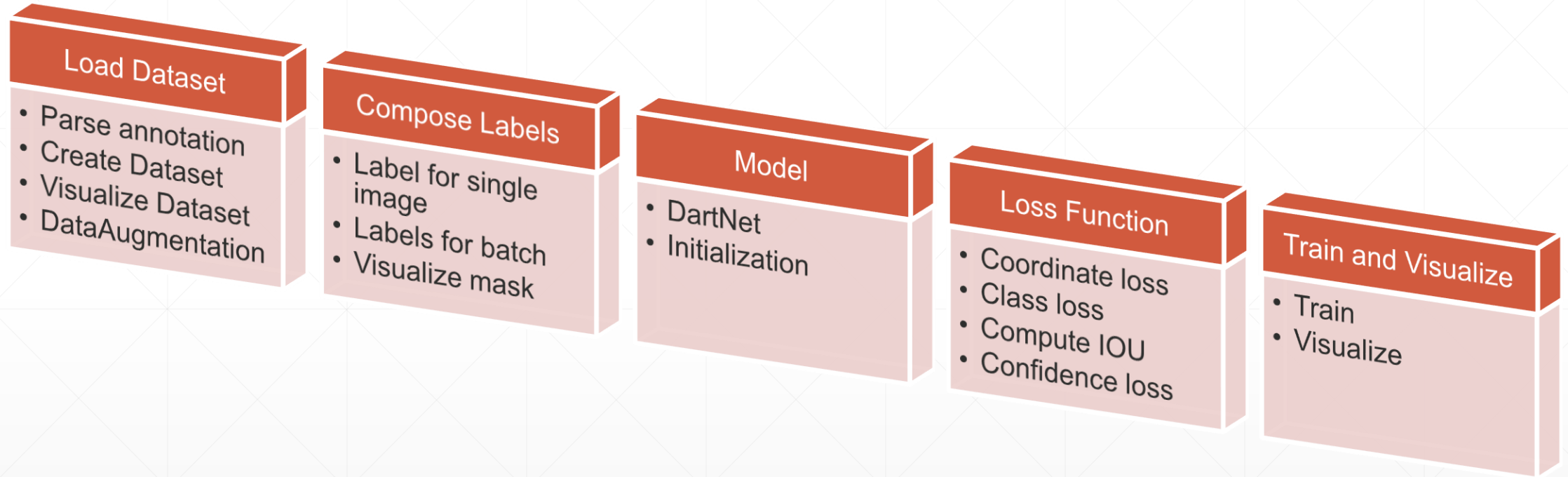
主讲：龙良曲

Plant Detector

- Sugarbeet 甜菜
- Weed 杂草



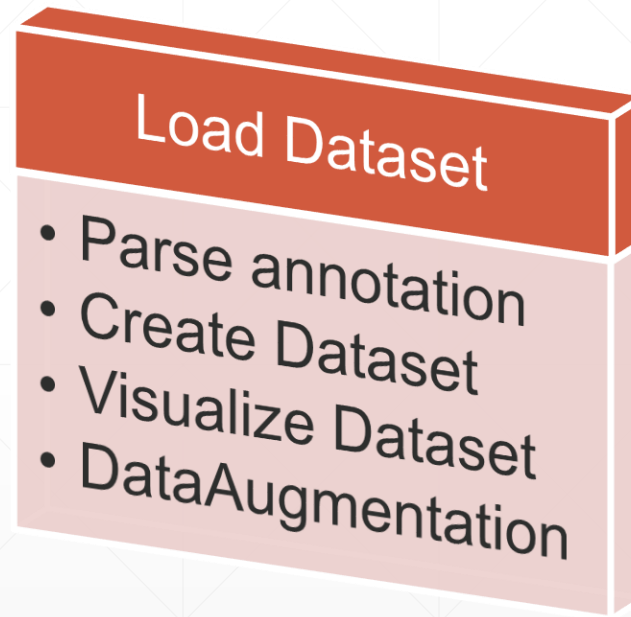
Pipeline



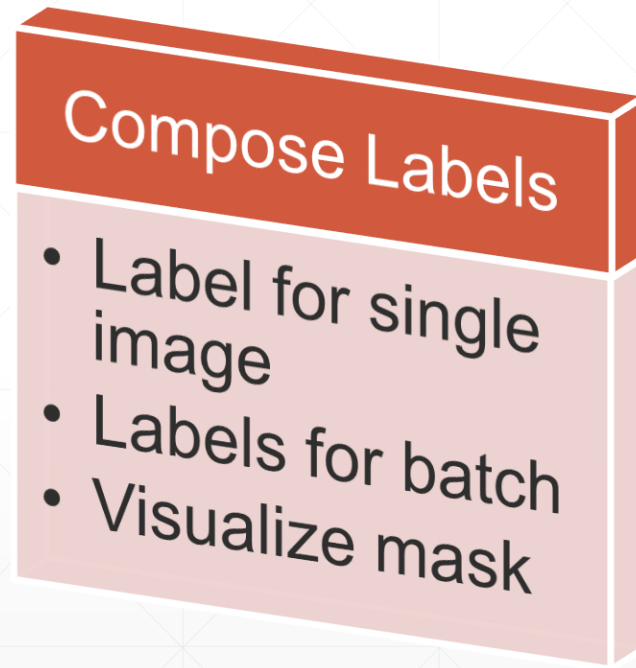


后退，我要开始装逼了

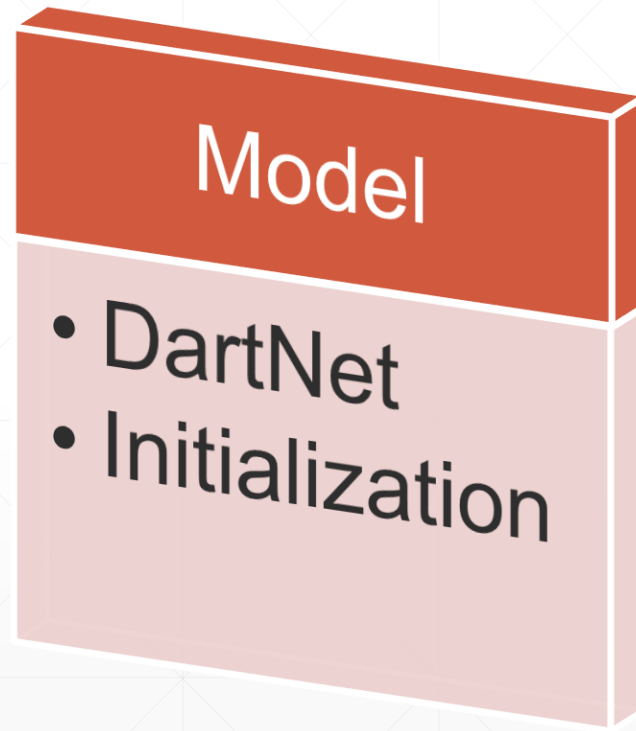
Step 1. Load Dataset



Step 2.Compose Labels



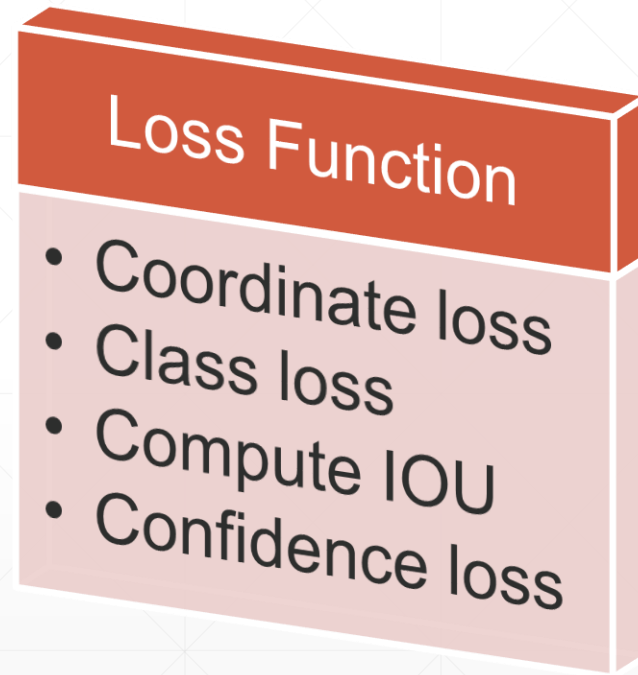
Step 3. Model



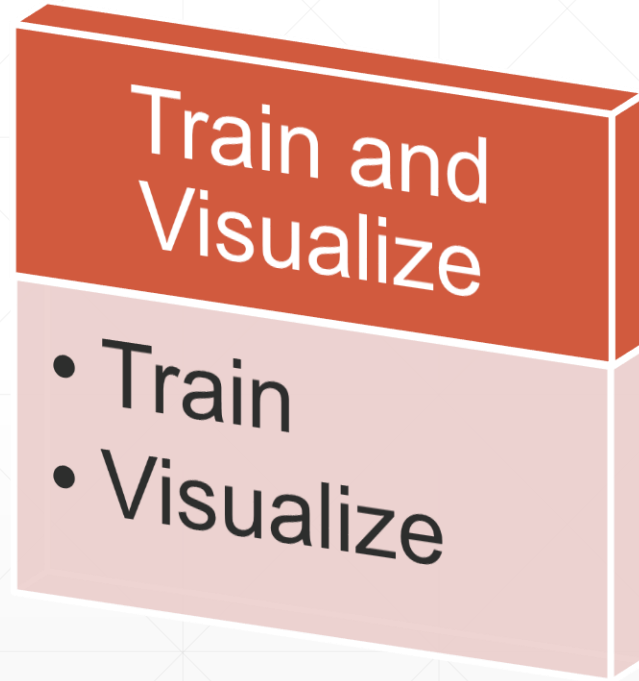
Dartnet-19

| Type | Filters | Size/Stride | Output |
|---------------|---------|----------------|------------------|
| Convolutional | 32 | 3×3 | 224×224 |
| Maxpool | | $2 \times 2/2$ | 112×112 |
| Convolutional | 64 | 3×3 | 112×112 |
| Maxpool | | $2 \times 2/2$ | 56×56 |
| Convolutional | 128 | 3×3 | 56×56 |
| Convolutional | 64 | 1×1 | 56×56 |
| Convolutional | 128 | 3×3 | 56×56 |
| Maxpool | | $2 \times 2/2$ | 28×28 |
| Convolutional | 256 | 3×3 | 28×28 |
| Convolutional | 128 | 1×1 | 28×28 |
| Convolutional | 256 | 3×3 | 28×28 |
| Maxpool | | $2 \times 2/2$ | 14×14 |
| Convolutional | 512 | 3×3 | 14×14 |
| Convolutional | 256 | 1×1 | 14×14 |
| Convolutional | 512 | 3×3 | 14×14 |
| Convolutional | 256 | 1×1 | 14×14 |
| Convolutional | 512 | 3×3 | 14×14 |
| Maxpool | | $2 \times 2/2$ | 7×7 |
| Convolutional | 1024 | 3×3 | 7×7 |
| Convolutional | 512 | 1×1 | 7×7 |
| Convolutional | 1024 | 3×3 | 7×7 |
| Convolutional | 512 | 1×1 | 7×7 |
| Convolutional | 1024 | 3×3 | 7×7 |
| Convolutional | 1000 | 1×1 | 7×7 |
| Avgpool | | Global | 1000 |
| Softmax | | | |

Step 4. Loss Function



Step 5. Train and Visualize



Acknowledgement

- <https://www.jeremyjordan.me/semantic-segmentation/>
 - <https://divamgupta.com/image-segmentation/2019/06/06/deep-learning-semantic-segmentation-keras.html>
-

下一课时

Thank You.
