Dataset: ILSVRC2012 dataset(IMAGENET)

Images in one class: 50

Semantic Segmentation Models: FCN, DeepLabv3

表 1 类别层级的ISSC和ISDC得分

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Class | , | | | , | | |
| FCN | DeepLabv3 | LR-ASPP | FCN | DeepLabv3 | LR-ASPP |
| Sorrel | **0.732** | **0.732** | 0.643 | 0.911 | **0.929** | 0.857 |
| Tabby | 0.536 | **0.750** | 0.589 | 0.643 | **0.929** | 0.857 |
| Bulbul | **0.798** | 0.750 | 0.655 | 0.958 | 0.857 | **0.964** |
| Siamese cat | 0.690 | **0.798** | 0.625 | 0.869 | **0.964** | 0.804 |
| Bison | 0.429 | 0.494 | **0.839** | 0.589 | 0.786 | **0.911** |
| Zebra | 0.946 | **1.000** | 0.875 | 0.929 | **0.982** | 0.929 |
| Average | 0.689 | **0.754** | 0.704 | 0.817 | **0.908** | 0.887 |

Note that row1 and row3 will be used.

表 2 SSC得分（越高越好）

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | SSC(add top-d most important concept) | | | | |
|  |  |  |  |  |  |
| FCN | 0.4762 | **0.7333** | 0.7333 | 0.7333 | 0.6952 |
| LR-ASPP | 0.4762 | 0.7048 | **0.7524** | **0.7619** | **0.7524** |
| DeepLabv3 | **0.5905** | 0.7238 | 0.7429 | 0.7524 | **0.7524** |

表 3 SDC得分（越低越好）

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | SDC(add top-d most important concept) | | | | |
|  |  |  |  |  |  |
| FCN | 0.6476 | 0.3810 | 0.3142 | 0.2381 | 0.2571 |
| LR-ASPP | 0.6476 | 0.4667 | 0.3524 | 0.2190 | 0.1238 |
| DeepLabv3 | **0.6095** | **0.3619** | **0.1810** | **0.1048** | **0.0571** |



