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| GTA5 $\longrightarrow$ Cityscapes | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Method** | **Feat. Ex.** | **Class IoU** | | | | | | | | | | | | | | | | | | | **mIoU** | **Code** |
| | | Road | Sidewalk | Building | Wall | Fence | Pole | T. Light | T. Sign | Veg. | Terrain | Sky | Person | Rider | Car | Truck | Bus | Train | M.bike | Bicycle | | |
| FCN-ITW [1] | VGG-16 | 70.4 | 32.4 | 62.1 | 14.9 | 5.4 | 10.9 | 14.2 | 2.7 | 79.2 | 21.3 | 64.6 | 44.1 | 4.2 | 70.4 | 8.0 | 7.3 | 0.0 | 3.5 | 0.0 | 27.1 | - |
| SIBAN [2] | VGG-16 | 83.4 | 13.0 | 77.8 | 20.4 | 17.5 | 24.6 | 22.8 | 9.6 | 81.3 | 29.6 | 77.3 | 42.7 | 10.9 | 76.0 | 22.8 | 17.9 | 5.7 | 14.2 | 2.0 | 34.2 | - |
| CyCADA [3] | VGG-16 | 85.2 | 37.2 | 76.5 | 21.8 | 15.0 | 23.8 | 22.9 | 21.5 | 80.5 | 31.3 | 60.7 | 50.5 | 9.0 | 76.9 | 17.1 | 28.2 | 4.5 | 9.8 | 0.0 | 35.4 | ✓ |
| CBST-SP [4] | VGG-16 | 90.4 | 50.8 | 72.0 | 18.3 | 9.5 | 27.2 | 28.6 | 14.1 | 82.4 | 25.1 | 70.8 | 42.6 | 14.5 | 76.9 | 5.9 | 12.5 | 1.2 | 14.0 | 28.6 | 36.1 | - |
| DCAN [5] | VGG-16 | 82.3 | 26.7 | 77.4 | 23.7 | 20.5 | 20.4 | 30.3 | 15.9 | 80.9 | 25.4 | 69.5 | 52.6 | 11.1 | 79.6 | 24.9 | 21.2 | 1.3 | 17.0 | 6.7 | 36.2 | ✓ |
| CLAN [6] | VGG-16 | 88.0 | 30.6 | 79.2 | 23.4 | 20.5 | 26.1 | 23.0 | 14.8 | 81.6 | 34.5 | 72.0 | 45.8 | 7.9 | 80.5 | 26.6 | 29.9 | 0.0 | 10.7 | 0.0 | 36.6 | - |
| DPR [7] | VGG-16 | 87.3 | 35.7 | 79.5 | 32.0 | 14.5 | 21.5 | 24.8 | 13.7 | 80.4 | 32.0 | 70.5 | 50.5 | 16.9 | 81.0 | 20.8 | 28.1 | 4.1 | 15.5 | 4.1 | 37.5 | - |
| MADAN [8] | VGG-16 | 86.2 | 37.7 | 79.1 | 20.1 | 17.8 | 15.5 | 14.5 | 21.4 | 78.5 | - | 73.4 | 49.7 | 16.8 | 77.8 | - | 28.3 | - | 17.7 | 27.5 | 41.4 | ✓ |
| SIM [9] | VGG-16 | 88.1 | 35.8 | 83.1 | 25.8 | 23.9 | 29.2 | 28.8 | 28.6 | 83.0 | 36.7 | 82.3 | 53.7 | 22.8 | 82.3 | 26.4 | 38.6 | 0.0 | 19.6 | 17.1 | 42.4 | ✓ |
| FDA-MBT [10] | VGG-16 | 86.1 | 35.1 | 80.6 | 30.8 | 20.4 | 27.5 | 30.0 | 26.0 | 82.1 | 30.3 | 73.6 | 52.5 | 21.7 | 81.7 | 24.0 | 30.5 | 29.9 | 14.6 | 24.0 | 42.2 | ✓ |
| LTIR [11] | VGG-16 | 92.5 | 54.5 | 83.9 | 34.5 | 25.5 | 31.0 | 30.4 | 18.0 | 84.1 | 39.6 | 83.9 | 53.6 | 19.3 | 81.7 | 21.1 | 13.6 | 17.7 | 12.3 | 6.5 | 42.3 | ✓ |
| TGCF-DA + SE [12] | VGG-16 | 90.2 | 51.5 | 81.1 | 15.0 | 10.7 | 37.5 | 35.2 | 28.9 | 84.1 | 32.7 | 75.9 | 62.7 | 19.9 | 82.6 | 22.9 | 28.3 | 0.0 | 23.0 | 25.4 | 42.5 | - |
| DCAN [5] | ResNet-101 | 88.5 | 37.4 | 79.3 | 24.8 | 16.5 | 21.3 | 26.3 | 17.4 | 80.8 | 30.9 | 77.6 | 50.2 | 19.2 | 77.7 | 21.6 | 27.1 | 2.70 | 14.3 | 18.1 | 38.5 | ✓ |
| DLOW [13] | ResNet-101 | 87.1 | 33.5 | 80.5 | 24.5 | 13.2 | 29.8 | 29.5 | 26.6 | 82.6 | 26.7 | 81.8 | 55.9 | 25.3 | 78.0 | 33.5 | 38.7 | 0.0 | 22.9 | 34.5 | 42.3 | ✓ |
| AdaptSegNet [14] | ResNet-101 | 86.5 | 36.0 | 79.9 | 23.4 | 23.3 | 23.9 | 35.2 | 14.8 | 83.4 | 33.3 | 75.6 | 58.5 | 27.6 | 73.7 | 32.5 | 35.4 | 3.9 | 30.1 | 28.1 | 42.4 | ✓ |
| SIBAN [2] | ResNet-101 | 88.5 | 35.4 | 79.5 | 26.3 | 24.3 | 28.5 | 32.5 | 18.3 | 81.2 | 40.0 | 76.5 | 58.1 | 25.8 | 82.6 | 30.3 | 34.4 | 3.4 | 21.6 | 21.5 | 42.6 | - |
| CyCADA [3] | ResNet-101 | 86.7 | 35.6 | 80.1 | 19.8 | 17.5 | 38.0 | 39.9 | 41.5 | 82.7 | 27.9 | 73.6 | 64.9 | 19.0 | 65.0 | 12.0 | 28.6 | 4.5 | 31.1 | 42.0 | 42.7 | ✓ |
| CLAN [6] | ResNet-101 | 87.0 | 27.1 | 79.6 | 27.3 | 23.3 | 28.3 | 35.5 | 24.2 | 83.6 | 27.4 | 74.2 | 58.6 | 28.0 | 76.2 | 33.1 | 36.7 | 6.7 | 31.9 | 31.4 | 43.2 | - |
| SWD [15] | ResNet-101 | 92.0 | 46.4 | 82.4 | 24.8 | 24.0 | 35.1 | 33.4 | 34.2 | 83.6 | 30.4 | 80.9 | 56.9 | 21.9 | 82.0 | 24.4 | 28.7 | 6.1 | 25.0 | 33.6 | 44.5 | ✓ |
| SSF-DAN [16] | ResNet-101 | 90.3 | 38.9 | 81.7 | 24.8 | 22.9 | 30.5 | 37.0 | 21.2 | 84.8 | 38.8 | 76.9 | 58.8 | 30.7 | 85.7 | 30.6 | 38.1 | 5.9 | 28.3 | 36.9 | 45.4 | - |
| ADVENT [17] | ResNet-101 | 89.4 | 33.1 | 81.0 | 26.6 | 26.8 | 27.2 | 33.5 | 24.7 | 83.9 | 36.7 | 78.8 | 58.7 | 30.5 | 84.8 | 38.5 | 44.5 | 1.7 | 31.6 | 32.4 | 45.5 | ✓ |
| IntraDA [18] | ResNet-101 | 90.6 | 37.1 | 82.6 | 30.1 | 19.1 | 29.5 | 32.4 | 20.6 | 85.7 | 40.5 | 79.7 | 58.7 | 31.1 | 86.3 | 31.1 | 86.3 | 0.0 | 30.2 | 35.8 | 46.3 | ✓ |
| MSL [19] | ResNet-101 | 89.4 | 43.0 | 82.1 | 30.5 | 21.3 | 30.3 | 34.7 | 24.0 | 85.3 | 39.4 | 78.2 | 63.0 | 22.9 | 84.6 | 36.4 | 43.0 | 5.5 | 34.7 | 33.5 | 46.4 | ✓ |
| PANDA [20] | ResNet-101 | 92.4 | 51.3 | 82.9 | 31.8 | 24.9 | 32.6 | 35.8 | 20.4 | 84.5 | 38.7 | 79.8 | 60.0 | 25.8 | 85.1 | 33.7 | 44.1 | 9.0 | 27.5 | 22.6 | 46.5 | - |
| DPR [7] | ResNet-101 | 92.3 | 51.9 | 82.1 | 29.2 | 25.1 | 24.5 | 33.8 | 33.0 | 82.4 | 32.8 | 82.2 | 58.6 | 27.2 | 84.3 | 33.4 | 46.3 | 2.2 | 29.5 | 32.3 | 46.5 | - |
| SWLS [21] | ResNet-101 | 92.7 | 48.0 | 78.8 | 25.7 | 27.2 | 36.0 | 42.2 | 45.3 | 80.6 | 14.6 | 66.0 | 62.1 | 30.4 | 86.2 | 28.0 | 45.6 | 35.9 | 16.8 | 34.7 | 47.2 | - |
| PyCDA [22] | ResNet-101 | 90.5 | 36.3 | 84.4 | 32.4 | 28.7 | 34.6 | 36.4 | 31.5 | 86.8 | 37.9 | 78.5 | 62.3 | 21.5 | 85.6 | 27.9 | 34.8 | 18.0 | 22.9 | 49.3 | 47.4 | - |
| LSE+FL [23] | ResNet-101 | 90.2 | 40.0 | 83.5 | 31.9 | 26.4 | 32.6 | 38.7 | 37.5 | 81.0 | 34.2 | 84.6 | 61.6 | 33.4 | 82.5 | 32.8 | 45.9 | 6.7 | 29.1 | 30.6 | 47.5 | - |
| BDL [24] | ResNet-101 | 91.0 | 44.7 | 84.2 | 34.6 | 27.6 | 30.2 | 36.0 | 36.0 | 85.0 | 43.6 | 83.0 | 58.6 | 31.6 | 83.3 | 35.3 | 49.7 | 3.3 | 28.8 | 35.6 | 48.5 | ✓ |
| CSCL [25] | ResNet-101 | 89.6 | 50.4 | 83.0 | 35.6 | 26.9 | 31.1 | 37.3 | 35.1 | 83.5 | 40.6 | 84.0 | 60.6 | 34.3 | 80.9 | 35.1 | 47.3 | 0.5 | 34.5 | 33.7 | 48.6 | - |
| CrCDA [26] | ResNet-101 | 92.4 | 55.3 | 82.3 | 31.2 | 29.1 | 32.5 | 33.2 | 35.6 | 83.5 | 34.8 | 84.2 | 58.9 | 32.2 | 84.7 | 40.6 | 46.1 | 2.1 | 31.1 | 32.7 | 48.6 | - |
| SISC-PWL [27] | ResNet-101 | 89.0 | 45.2 | 78.2 | 22.9 | 27.3 | 37.4 | 46.1 | 43.8 | 82.9 | 18.6 | 61.2 | 60.4 | 26.7 | 85.4 | 35.9 | 44.9 | 36.4 | 37.2 | 49.3 | 49.0 | - |
| SIM [9] | ResNet-101 | 90.6 | 44.7 | 84.8 | 34.3 | 28.7 | 31.6 | 35.0 | 37.6 | 84.7 | 43.3 | 85.3 | 57.0 | 31.5 | 83.8 | 42.6 | 48.5 | 1.9 | 30.4 | 39.0 | 49.2 | ✓ |
| LDR [28] | ResNet-101 | 90.8 | 41.4 | 84.7 | 35.1 | 27.5 | 31.2 | 38.0 | 32.8 | 85.6 | 42.1 | 84.9 | 59.6 | 34.4 | 85.0 | 42.8 | 52.7 | 3.4 | 30.9 | 38.1 | 49.5 | - |
| CCM [29] | ResNet-101 | 93.5 | 57.6 | 84.6 | 39.3 | 24.1 | 25,2 | 35.0 | 17.3 | 85.0 | 40.6 | 86.5 | 58.7 | 28.7 | 85.8 | 49.0 | 56.4 | 5.4 | 31.9 | 43.2 | 49.9 | ✓ |
| CAG-UDA [30] | ResNet-101 | 90.4 | 51.6 | 83.8 | 34.2 | 27.8 | 38.4 | 25.3 | 48.4 | 85.4 | 38.2 | 78.1 | 58.6 | 34.6 | 84.7 | 21.9 | 42.7 | 41.1 | 29.3 | 37.2 | 50.2 | ✓ |
| LTIR [11] | ResNet-101 | 92.9 | 55.0 | 85.3 | 34.2 | 31.1 | 34.9 | 40.7 | 34.0 | 85.2 | 40.1 | 87.1 | 61.0 | 31.1 | 82.5 | 32.3 | 42.9 | 0.3 | 36.4 | 46.1 | 50.2 | ✓ |
| FDA-MBT [10] | ResNet-101 | 92.5 | 53.3 | 82.4 | 26.5 | 27.6 | 36.4 | 40.6 | 38.9 | 82.3 | 39.8 | 78.0 | 62.6 | 34.4 | 84.9 | 34.1 | 53.1 | 16.9 | 27.7 | 46.4 | 50.5 | ✓ |
| CRST(MRKLD) + TPLD [31] | ResNet-101 | 94.2 | 60.5 | 82.8 | 36.6 | 16.6 | 39.3 | 29.0 | 25.5 | 85.6 | 44.9 | 84.4 | 60.6 | 27.4 | 84.1 | 37.0 | 47.0 | 31.2 | 36.1 | 50.3 | 51.2 | - |
| IAST [32] | ResNet-101 | 93.8 | 57.8 | 85.1 | 39.5 | 26.7 | 26.2 | 43.1 | 34.7 | 84.9 | 32.9 | 88.0 | 62.6 | 29.0 | 87.3 | 39.2 | 49.6 | 23.2 | 34.7 | 39.6 | 51.5 | ✓ |
| IAST-MST [32] | ResNet-101 | 94.1 | 58.8 | 85.4 | 39.7 | 29.2 | 25.1 | 43.1 | 34.2 | 84.8 | 34.6 | 88.7 | 62.7 | 30.3 | 87.6 | 42.3 | 50.3 | 24.7 | 35.2 | 40.2 | 52.2 | ✓ |
| CyCADA [3] | DRN-26 | 79.1 | 33.1 | 77.9 | 23.4 | 17.3 | 32.1 | 33.3 | 31.8 | 81.5 | 26.7 | 69.0 | 62.8 | 14.7 | 74.5 | 20.9 | 25.6 | 6.9 | 18.8 | 20.4 | 39.5 | ✓ |
| CrDoCo [33] | DRN-26 | 95.1 | 49.2 | 86.4 | 35.2 | 22.1 | 36.1 | 40.9 | 29.1 | 85.0 | 33.1 | 75.8 | 67.3 | 26.8 | 88.9 | 23.4 | 19.3 | 4.3 | 25.3 | 13.5 | 45.1 | (✓) |
| CBST-SP+MST [4] | ResNet-38 | 89.6 | 58.9 | 78.5 | 33.0 | 22.3 | 41.4 | 48.2 | 39.2 | 83.6 | 24.3 | 65.4 | 49.3 | 20.2 | 83.3 | 39.0 | 48.6 | 12.5 | 20.3 | 35.3 | 47.0 | - |