

# Metrics of evaluation algorithm

## Detector: YoloX, tracker: ByteTrack

Terminal	Local	x	+	-	↕																			
						RcLl	Prcn	GT	MT	PT	ML	FP	FN	IDs	FM	MOTA	MOTP	num_objects						
TUD-Stadtmitte						89.8%	95.4%	10	90.0%	10.0%	0.0%	4.3%	10.2%	0.2%	1.0%	85.3%	0.286	1156						
TUD-Campus						92.8%	88.3%	8	100.0%	0.0%	0.0%	12.3%	7.2%	0.6%	2.2%	79.9%	0.276	359						
KITTI-17						91.2%	55.8%	9	88.9%	11.1%	0.0%	72.3%	8.8%	0.3%	2.3%	18.6%	0.224	683						
MOT16-11						94.2%	94.6%	69	79.7%	15.9%	4.3%	5.4%	5.8%	0.3%	0.6%	88.5%	0.123	9174						
MOT16-09						90.0%	96.3%	25	84.0%	16.0%	0.0%	3.5%	10.0%	0.6%	1.1%	86.0%	0.138	5257						
PETS09-S2L1						97.9%	89.6%	19	100.0%	0.0%	0.0%	11.3%	2.1%	0.0%	0.9%	86.5%	0.255	4476						
OVERALL						93.6%	91.8%	140	85.7%	12.1%	2.1%	8.4%	6.4%	0.3%	0.9%	84.9%	0.170	21105						
						IDF1	IDP	IDR	RcLl	Prcn	GT	MT	PT	ML	FP	FN	IDs	FM	MOTA	MOTP	IDt	IDa	IDm	num_objects
TUD-Stadtmitte						80.5%	83.0%	78.1%	89.8%	95.4%	10	9	1	0	50	118	2	11	85.3%	0.286	2	1	1	1156
TUD-Campus						88.0%	85.9%	90.3%	92.8%	88.3%	8	8	0	0	44	26	2	8	79.9%	0.276	2	0	1	359
KITTI-17						69.1%	55.7%	91.1%	91.2%	55.8%	9	8	1	0	494	60	2	16	18.6%	0.224	1	0	0	683
MOT16-11						83.8%	84.0%	83.7%	94.2%	94.6%	69	55	11	3	495	531	28	51	88.5%	0.123	17	10	3	9174
MOT16-09						68.7%	71.1%	66.5%	90.0%	96.3%	25	21	4	0	182	526	29	56	86.0%	0.138	27	6	5	5257
PETS09-S2L1						93.6%	89.6%	97.9%	97.9%	89.6%	19	19	0	0	507	96	0	40	86.5%	0.255	0	0	0	4476
OVERALL						81.6%	80.9%	82.4%	93.6%	91.8%	140	120	17	3	1772	1357	63	182	84.9%	0.170	49	17	10	21105
2025-06-27 12:03:20   INFO   __main__:273 - Completed																								
(.venv) stas@Stas-GT:~/ID-REID/ByteTrack\$																								

terminalLocal+

All sequences for track\_results finished in 0.63 seconds

HOTA: track_results-pedestrian	HOTA	DetA	AssA	DetRe	DetPr	AssRe	AssPr	LocA	OWTA	HOTA(0)	LocA(0)	HOTALocA(0)						
KITTI-17	51.967	42.117	64.133	73.861	45.163	74.882	70.693	80.523	68.784	69.847	76.03	53.184						
MOT16-09	59.673	75.476	47.272	80.526	86.165	59.13	65.48	88.243	61.693	69.936	85.81	60.012						
MOT16-11	74.864	78.067	72.005	84.968	85.303	79.05	82.626	88.961	78.213	85.724	87.089	74.657						
PETS09-S2L1	67.045	65.131	69.129	75.002	68.695	76.591	73.066	78.388	71.977	92.849	73.929	68.642						
TUD-Campus	59.293	59.455	59.247	68.963	65.671	71.133	65.899	77.022	63.914	84.558	71.476	60.439						
TUD-Stadtmitte	56.642	61.795	52.213	65.912	70.032	61.019	64.821	75.964	58.635	81.026	70.477	57.105						
COMBINED	68.075	70.841	65.951	80.073	78.528	74.835	77.314	85.533	72.61	82.897	82.357	68.272						
CLEAR: track_results-pedestrian	MOTA	MOTP	MODA	CLR_Re	CLR_Pr	MTR	PTR	MLR	sMOTA	CLR_TP	CLR_FN	CLR_FP	IDSW	MT	PT	ML	Frag	
KITTI-17	18.009	77.665	18.302	90.922	55.595	88.889	11.111	0	-2.2988	621	62	496	2	8	1	0	16	
MOT16-09	86.684	87.085	87.217	90.337	96.662	88	12	0	75.018	4749	508	164	28	22	3	0	50	
MOT16-11	88.511	87.747	88.794	94.201	94.572	79.71	15.942	4.3478	76.969	8642	532	496	26	55	11	3	50	
PETS09-S2L1	86.528	74.494	86.528	97.855	89.626	100	0	0	61.57	4380	96	507	0	19	0	0	42	
TUD-Campus	78.83	72.353	79.944	92.479	88.064	100	0	0	53.262	332	27	45	4	8	0	0	9	
TUD-Stadtmitte	85.294	71.4	85.467	89.792	95.404	90	10	0	59.613	1038	118	50	2	9	1	0	11	
COMBINED	85.013	83.217	85.307	93.637	91.831	86.429	11.429	2.1429	69.298	19762	1343	1758	62	121	16	3	178	
Identity: track_results-pedestrian	IDF1	IDR	IDP	IDTP	IDFN	IDFP												
KITTI-17	69.111	91.069	55.685	622	61	495												
MOT16-09	68.732	66.483	71.138	3495	1762	1418												
MOT16-11	83.825	83.66	83.99	7675	1499	1463												
PETS09-S2L1	93.56	97.855	89.626	4380	96	507												
TUD-Campus	87.772	89.972	85.676	323	36	54												
TUD-Stadtmitte	80.481	78.114	82.996	903	253	185												
COMBINED	81.633	82.435	80.846	17398	3707	4122												
Count: track_results-pedestrian	Dets	GT_Dets	IDs	GT_IDs														

TrackEval > trackeval > datasets > mot\_challenge\_2d\_box.py

25/32CRLFUTF-84 spacesPython

TrackEval > trackeval > datasets > mot\_challenge\_2d\_box.py

25:32 CRLF UTF-8 4 spaces Python

### YoloX + Deepsort

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      Rcll  Prcn  GT      MT  PT  ML  FP  FN  IDs  FM  MOTA  MOTP  num_objects
TUD-Stadtmitte  87.4% 96.7% 10  80.0% 20.0% 0.0% 3.0% 12.6% 0.3% 1.0% 84.0% 0.289      1156
TUD-Campus     88.9% 78.0% 8   87.5% 12.5% 0.0% 25.1% 11.1% 0.3% 2.2% 63.5% 0.278      359
KITTI-17       88.1% 58.0% 9   88.9% 11.1% 0.0% 63.8% 11.9% 1.2% 2.2% 23.1% 0.229      683
MOT16-11       93.2% 94.6% 69  82.6% 15.9% 1.4% 5.4% 6.8% 0.3% 0.6% 87.5% 0.122     9174
MOT16-09       88.4% 96.9% 25  88.0% 12.0% 0.0% 2.8% 11.6% 0.9% 1.3% 84.6% 0.129     5257
PETS09-S2L1    97.5% 89.5% 19 100.0% 0.0% 0.0% 11.4% 2.5% 0.0% 0.9% 86.0% 0.254     4476
OVERALL        92.3% 91.9% 140 86.4% 12.9% 0.7% 8.1% 7.7% 0.5% 0.9% 83.8% 0.168    21105

      IDf1  IDP  IDR  Rcll  Prcn  GT  MT  PT  ML  FP  FN  IDs  FM  MOTA  MOTP  IDt  IDa  IDm  num_objects
TUD-Stadtmitte  82.4% 86.8% 78.5% 87.4% 96.7% 10  8  2  0  35 146  4  11 84.0% 0.289  2  2  0      1156
TUD-Campus     76.0% 71.4% 81.3% 88.9% 78.0% 8   7  1  0  90 40  1  8 63.5% 0.278  0  1  0      359
KITTI-17       63.0% 52.2% 79.4% 88.1% 58.0% 9   8  1  0  436 81  8  15 23.1% 0.229  1  6  0      683
MOT16-11       78.0% 78.6% 77.4% 93.2% 94.6% 69 57 11  1 491 623 32 55 87.5% 0.122  8 20  2     9174
MOT16-09       67.7% 71.0% 64.7% 88.4% 96.9% 25 22  3  0 149 612 49 70 84.6% 0.129 25 25  4     5257
PETS09-S2L1    87.4% 83.9% 91.3% 97.5% 89.5% 19 19  0  0 510 114  2 40 86.0% 0.254  3  2  3     4476
OVERALL        77.2% 77.0% 77.4% 92.3% 91.9% 140 121 18  1 1711 1616 96 199 83.8% 0.168 39 56  9    21105

2025-06-27 12:53:14 | INFO      | __main__:271 - Completed
(.venv) stas@Stas-GT:~/ID-REID/ByteTrack$

```

All sequences for track\_results\_deepsort finished in 0.62 seconds

HOTA: track_results_deepsort-pedestrianHOTA	DetA	AssA	DetRe	DetPr	AssRe	AssPr	LocA	OWTA	HOTA(0)	LocA(0)	HOTALocA(0)
KITTI-17	48.322	42.505	54.975	70.879	46.638	62.657	72.145	80.162	62.398	65.634	49.185
MOT10-09	61.283	75.185	50.088	79.511	87.19	54.04	79.801	88.628	63.103	69.98	86.665
MOT10-11	70.386	77.088	64.385	83.967	85.192	68.324	87.855	88.963	73.527	80.087	87.015
PETS09-S2L1	63.923	64.997	62.942	74.785	68.706	74.773	67.374	78.419	68.576	88.032	73.917
TUD-Campus	52.838	50.678	55.216	65.577	57.56	62.633	69.951	77.043	68.17	74.855	71.686
TUD-Stadtmitte	58.255	60.678	56.554	63.868	70.652	63.297	67.848	76.179	68.084	82.741	70.229
COMBINED	65.519	70.151	61.634	79.672	78.718	67.677	82.529	85.613	69.769	79.609	65.676

  

CLEAR: track_results_deepsort-pedestrianHOTA	MOTP	MODA	CLR_Re	CLR_Pr	MTR	PTR	MLR	sMOTA	CLR_TP	CLR_FN	CLR_FP	IDSW	MT	PT	ML	Frag
KITTI-17	22.548	77.128	23.719	87.848	57.803	88.889	11.111	0	2.4553	600	83	438	8	1	0	15
MOT10-09	84.573	87.114	85.524	88.358	96.892	88	12	0	73.187	4645	612	149	58	22	3	71
MOT10-11	87.508	87.761	87.857	93.209	94.57	82.609	15.942	1.4493	76.101	8551	623	491	32	57	11	55
PETS09-S2L1	86.014	74.559	86.059	97.453	89.532	108	0	0	61.222	4362	114	518	2	19	0	42
TUD-Campus	62.953	72.12	63.231	88.579	77.751	87.5	12.5	0	38.256	318	41	91	1	7	1	9
TUD-Stadtmitte	83.997	71.116	84.343	87.37	96.651	80	20	0	58.761	1010	146	35	4	8	2	11
COMBINED	83.748	83.206	84.208	92.329	91.915	86.429	12.857	0.71429	68.243	19486	1619	1714	97	121	18	203

  

Identity: track_results_deepsort-pedestrianIDF1	IDR	IDP	IDTP	IDFN	IDFP
KITTI-17	62.987	79.356	52.216	542	141
MOT10-09	67.695	64.714	70.964	3402	1855
MOT10-11	77.997	77.436	78.567	7104	2870
PETS09-S2L1	87.42	91.287	83.867	4086	390
TUD-Campus	75.781	81.058	71.149	291	68
TUD-Stadtmitte	82.417	78.46	86.794	907	249
COMBINED	77.211	77.385	77.038	16332	4773

  

Count: track_results_deepsort-pedestrianDets	GT_Dets	IDs	GT_IDs
KITTI-17	1038	683	34

## YoloX + Motdt

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Terminal Local x + v

Rc1l Prcn GT MT PT ML FP FN IDs FM MOTA MOTP num_objects
TUD-Stadtmitte 87.5% 96.8% 10 80.0% 20.0% 0.0% 2.9% 12.5% 0.6% 1.2% 84.1% 0.289 1156
TUD-Campus 91.6% 83.3% 8 100.0% 0.0% 0.0% 18.4% 8.4% 0.6% 1.9% 72.7% 0.266 359
KITTI-17 89.2% 62.0% 9 88.9% 11.1% 0.0% 54.6% 10.8% 1.3% 2.5% 33.2% 0.223 683
MOT16-11 92.8% 95.4% 69 78.3% 20.3% 1.4% 4.4% 7.2% 0.2% 0.7% 88.1% 0.121 9174
MOT16-09 87.5% 97.8% 25 84.0% 16.0% 0.0% 2.0% 12.5% 0.9% 1.4% 84.6% 0.122 5257
PETS09-S2L1 97.7% 89.6% 19 100.0% 0.0% 0.0% 11.3% 2.3% 0.2% 1.0% 86.2% 0.255 4476
OVERALL 92.1% 92.9% 140 84.3% 15.0% 0.7% 7.0% 7.9% 0.4% 1.0% 84.6% 0.166 21105

IDF1 IDP IDR Rc1l Prcn GT MT PT ML FP FN IDs FM MOTA MOTP IDt IDa IDm num_objects
TUD-Stadtmitte 75.2% 79.2% 71.6% 87.5% 96.8% 10 8 2 0 33 144 7 14 84.1% 0.289 6 2 1 1156
TUD-Campus 78.5% 74.9% 82.5% 91.6% 83.3% 8 8 0 0 66 30 2 7 72.7% 0.266 0 2 0 359
KITTI-17 71.8% 60.9% 87.6% 89.2% 62.0% 9 8 1 0 373 74 9 17 33.2% 0.223 3 4 1 683
MOT16-11 83.9% 85.1% 82.7% 92.8% 95.4% 69 54 14 1 406 664 18 67 88.1% 0.121 9 13 5 9174
MOT16-09 70.4% 74.5% 66.7% 87.5% 97.8% 25 21 4 0 104 655 48 72 84.6% 0.122 18 23 4 5257
PETS09-S2L1 80.2% 76.9% 83.8% 97.7% 89.6% 19 19 0 0 505 104 7 43 86.2% 0.255 2 6 2 4476
OVERALL 78.9% 79.2% 78.5% 92.1% 92.9% 140 118 21 1 1487 1671 91 220 84.6% 0.166 38 50 13 21105

2025-06-27 13:19:22 | INFO | __main__:271 - Completed
(.venv) stas@Stas-GT:~/ID-REID/ByteTrack$

ByteTrack > yolox > motdt_tracker > motdt_tracker.py
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```
Terminal Local x + v

18 eval_sequence(TUD-Stadtmitte, track_results_motdt) 0.0387 sec

All sequences for track_results_motdt finished in 0.61 seconds

HOTA: track_results_motdt-pedestrianHOTA DetA AssA DetRe DetPr AssRe AssPr LocA OWTA HOTA(0) LocA(0) HOTALocA(0)
KITTI-17 53.393 46.108 61.844 72.444 50.386 71.545 70.719 80.423 66.9 72.256 75.765 54.745
MOT16-09 63.527 74.485 54.247 78.45 87.635 62.574 79.002 88.782 65.23 72.964 86.992 63.473
MOT16-11 74.522 77.674 71.603 83.761 86.185 77.296 85.561 89.103 77.443 85.501 87.305 74.647
PETS09-S2L1 60.927 65.066 57.169 74.881 68.724 70.029 66.722 78.389 65.406 84.165 73.925 62.219
TUD-Campus 55.832 56.903 54.895 69.301 62.985 62.407 69.455 77.692 61.674 78.157 72.371 56.563
TUD-Stadtmitte 52.376 60.194 45.708 63.577 70.33 55.45 57.725 75.598 53.89 76.05 69.71 53.015
COMBINED 67.172 70.552 64.452 78.837 79.531 72.912 80.555 85.689 71.234 81.169 82.65 67.086

CLEAR: track_results_motdt-pedestrianHOTA MOTP MODA CLR_Re CLR_Pr MTR PTR MLR sMOTA CLR_TP CLR_FN CLR_FP IDSW MT PT ML Frag
KITTI-17 33.236 77.693 34.553 89.165 62.016 88.889 11.111 0 13.346 609 74 373 9 8 1 0 17
MOT16-09 85.543 87.656 86.475 87.997 98.3 84 16 0 74.681 4626 631 80 49 21 4 0 73
MOT16-11 88.14 87.931 88.337 92.762 95.446 78.261 20.29 1.4493 76.945 8510 664 406 18 54 14 1 67
PETS09-S2L1 86.238 74.506 86.394 97.676 89.645 180 0 0 61.336 4372 104 505 7 19 0 0 0 45
TUD-Campus 72.145 73.135 72.702 91.365 83.038 180 0 0 47.782 328 11 67 2 8 0 0 0 8
TUD-Stadtmitte 84.083 71.176 84.689 87.543 96.842 80 20 0 58.85 1012 144 33 7 8 2 0 0 12
COMBINED 84.819 83.411 85.255 92.191 93.002 84.286 15 0.71429 69.525 19457 1640 1464 92 110 21 1 222

Identity: track_results_motdt-pedestrianIDF1 IDR IDP IDTP IDFN IDFP
KITTI-17 71.832 87.555 60.896 598 85 384
MOT16-09 70.421 66.73 74.543 3508 1749 1198
MOT16-11 83.925 82.745 85.139 7591 1583 1325
PETS09-S2L1 80.231 83.825 76.933 3752 724 1125
TUD-Campus 78.249 82.173 74.684 295 64 180
TUD-Stadtmitte 75.239 71.626 79.234 828 328 217
COMBINED 78.865 78.522 79.212 16572 4533 4349

TrackEval > trackeval > datasets > mot_challenge_2d_box.py 25:32 CRLF UTF-8 4 spaces Python
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