

Training options

20k steps, augmentations

30k steps, augmentations

20k steps, no augmentations

10k steps, augmentations

Hold detection

Detection with threshold 50%

Detection with threshold 70%

Detection with threshold 90%

Detection with threshold 30%

Hold tracking

Optical flow association, removing tracks shorter than 3

Optical flow association, removing tracks shorter than 6

Optical flow association, removing tracks shorter than 12

Last position association, removing tracks shorter than 3

Optical flow association, no short track removal

Calculating relative transformations

Using hold association, 2 degrees of freedom

Using optical flow, 2 degrees of freedom

Using hold association, 4 degrees of freedom

Calculating absolute transformations

8 degrees of freedom

6 degrees of freedom

4 degrees of freedom

8 degrees of freedom, DBSCAN clustering

Smoothing absolute transformations

Cubic spline smoothing, coefficient 0.0005

Cubic spline smoothing, coefficient 0.00005

Cubic spline smoothing, coefficient 0.0005, no increased weight of first 12 frames

Cubic spline smoothing, coefficient 0.005

Cubic spline smoothing, coefficient 0.0005, keyframes have double weight

Savitzky-Golay filter, window size 49

Cubic spline smoothing, coefficient 0.0005, using only keyframes

Cleaning absolute transformations

Cleaning with eps 0.3

Cleaning with eps 0.4

Cleaning with eps 0.2

	1_	2_	4_	5_	22_	23_	25_	27_	29_	34_	34_	34_	36_	36_	50_	51_	52_	52_	52_	54_	55_
selected	4	5	5	2	5	4	1	5	4	5	5	3	3	3	4	5	5	5	5	4	5
model_30k	5	5	5	2	5	4	2	5	3	5	5	1	2	3	4	5	5	5	3	5	
model_20k_noaugment	5	5	5	2	5	4	1	5	3	5	5	1	3	4	2	5	4	5	2	5	
model_10k	5	4	4	2	5	3	1	5	2	4	5	1	3	4	3	5	5	5	4	5	

	1_	2_	4_	5_	22_	23_	25_	27_	29_	34_	34_	34_	36_	36_	50_	51_	52_	52_	52_	54_	55_
selected	4	5	5	2	5	4	1	5	4	5	5	3	3	3	4	5	5	5	5	4	5
detection_threshold07	4	5	5	2	5	4	1	5	4	5	5	2	3	3	3	5	5	5	4	4	
detection_threshold09	4	5	5	1	5	3	1	5	2	5	5	2	2	4	4	5	5	5	4	5	
detection_threshold03	4	5	5	2	3	4	1	4	3	5	5	3	3	3	4	4	5	5	4	5	

	1_	2_	4_	5_	22_	23_	25_	27_	29_	34_	34_	34_	36_	36_	50_	51_	52_	52_	52_	54_	55_
selected	4	5	5	2	5	4	1	5	4	5	5	3	3	3	4	5	5	5	5	4	5
association_rem6	4	5	5	2	5	4	1	5	4	5	5	3	3	4	3	5	5	5	4	5	
association_rem12	4	5	5	3	4	4	1	5	3	5	5	3	3	5	3	5	5	5	5	3	
association_lastpos	4	5	5	2	5	4	1	4	4	5	5	3	3	3	4	5	5	5	4	5	
association_rem0	4	5	5	2	5	4	1	5	4	5	5	2	3	3	4	5	5	5	4	4	

	1_	2_	4_	5_	22_	23_	25_	27_	29_	34_	34_	34_	36_	36_	50_	51_	52_	52_	52_	54_	55_
selected	4	5	5	2	5	4	1	5	4	5	5	3	3	3	4	5	5	5	4	5	
relative_optflow	4	5	5	2	5	4	1	4	4	5	4	3	2	3	4	5	4	4	4	4	
relative_degrees of freedom4	3	3	1	1	1	2	1	2	2	2	2	1	2	2	1	3	1	2	1	1	

	1_	2_	4_	5_	22_	23_	25_	27_	29_	34_	34_	34_	36_	36_	50_	51_	52_	52_	52_	54_	55_
selected	4	5	5	2	5	4	1	5	4	5	5	3	3	3	4	5	5	5	4	5	
absolute_degrees of freedom6	5	5	5	2	4	5	2	5	3	5	5	3	3	3	2	5	5	4	3	5	
absolute_degrees of freedom4	4	5	5	3	3	4	2	4	3	5	5	3	3	3	3	5	5	5	4	5	
absolute_dbscan	4	5	5	2	4	4	1	5	4	5	5	2	3	3	3	4	5	1	5	3	

	1_	2_	4_	5_	22_	23_	25_	27_	29_	34_	34_	34_	36_	36_	50_	51_	52_	52_	52_	54_	55_
selected	4	5	5	2	5	4	1	5	4	5	5	3	3	3	4	5	5	5	4	5	
smoothing_csaps00005	4	5	5	2	5	4	1	5	4	5	5	3	3	3	4	5	5	5	4	5	
smoothing_noinitialweight	4	5	5	2	5	4	2	5	4	5	5	3	3	3	4	5	5	5	4	3	
smoothing_csaps005	4	4	5	2	5	5	1	4	4	5	5	3	3	3	4	5	5	5	4	3	
smoothing_nkfweight05	4	4	5	2	5	4	1	4	4	4	5	3	3	3	4	5	5	5	4	4	
smoothing_savgol	4	4	4	2	5	4	1	4	4	5	4	2	3	3	4	5	5	4	4	4	
smoothing_nkfweight0	4	4	4	2	5	3	1	4	3	4	4	3	2	2	3	5	5	3	3	4	

	1_	2_	4_	5_	22_	23_	25_	27_	29_	34_	34_	34_	36_	36_	50_	51_	52_	52_	52_	54_	55_
selected	4	5	5	2	5	4	1	5	4	5	5	3	3	3	4	5	5	5	4	5	
cleaning_eps04	4	4	5	2	4	5	1	4	4	5	5	4	3	4	4	5	5	5	4	4	
cleaning_eps02	5	5	5	2	4	4	1	5	3	5	5	1	3	3	3	5	5	5	4	4	

avg	#5	#4	#3	#2	#1	AP	AR@10d
4.10	10	5	3	1	1	0.680	0.744
3.95	11	2	3	3	1	0.687	0.759
3.80	10	3	2	3	2	0.755	0.814
3.75	8	5	3	2	2	0.665	0.745

avg	#5	#4	#3	#2	#1
4.10	10	5	3	1	1
3.95	9	5	3	2	1
3.85	10	4	1	3	2
3.85	7	6	5	1	1

avg	#5	#4	#3	#2	#1
4.10	10	5	3	1	1
4.10	10	5	3	1	1
4.05	10	3	6	0	1
4.05	9	6	3	1	1
4.00	9	6	2	2	1

avg	#5	#4	#3	#2	#1
4.10	10	5	3	1	1
3.80	5	10	2	2	1
1.70	0	0	3	8	9

avg	#5	#4	#3	#2	#1
4.10	10	5	3	1	1
3.95	10	2	5	3	0
3.95	8	4	7	1	0
3.65	7	5	4	2	2

avg	#5	#4	#3	#2	#1
4.10	10	5	3	1	1
4.10	10	5	3	1	1
4.05	9	5	4	2	0
3.95	8	6	4	1	1
3.90	6	9	3	1	1
3.75	4	11	2	2	1
3.40	3	7	6	3	1

avg	#5	#4	#3	#2	#1
4.10	10	5	3	1	1
4.05	7	10	1	1	1
3.85	9	4	4	1	2