

>> Untitled

Standard Errors of Estimated Stereo Camera Parameters

Camera 1 Intrinsics

Focal length (pixels): [700.5038 +/- 0.1659 704.6196 +/- 0.1638]
Principal point (pixels):[633.5734 +/- 0.1401 347.5664 +/- 0.1545]
Radial distortion: [-0.1719 +/- 0.0001 0.0273 +/- 0.0001]

Camera 1 Extrinsics

Rotation vectors:

[0.2356 +/- 0.0003	0.1921 +/- 0.0002	-0.2183 +/- 0.0001]
[-0.3591 +/- 0.0003	-0.2441 +/- 0.0003	0.0533 +/- 0.0001]
[0.2807 +/- 0.0003	-0.5526 +/- 0.0002	0.0899 +/- 0.0001]
[0.2646 +/- 0.0003	-0.2071 +/- 0.0002	0.1144 +/- 0.0001]
[0.0568 +/- 0.0009	-1.0068 +/- 0.0009	2.8443 +/- 0.0003]
[-0.2558 +/- 0.0008	-0.5384 +/- 0.0008	3.0275 +/- 0.0001]
[-0.2463 +/- 0.0008	-0.2640 +/- 0.0008	3.0425 +/- 0.0002]
[-0.4132 +/- 0.0013	-0.5817 +/- 0.0016	2.8312 +/- 0.0003]
[0.3355 +/- 0.0002	-0.0058 +/- 0.0003	0.1420 +/- 0.0001]
[0.5171 +/- 0.0003	0.5941 +/- 0.0003	0.0449 +/- 0.0001]
[0.4571 +/- 0.0003	-0.1389 +/- 0.0003	0.0670 +/- 0.0001]
[-0.3101 +/- 0.0002	0.3937 +/- 0.0002	0.0842 +/- 0.0001]
[0.2868 +/- 0.0002	0.4071 +/- 0.0002	0.1903 +/- 0.0001]
[0.2859 +/- 0.0003	-0.3100 +/- 0.0002	0.2074 +/- 0.0001]
[0.4339 +/- 0.0002	-0.1160 +/- 0.0002	0.2021 +/- 0.0001]
[0.1807 +/- 0.0003	0.0494 +/- 0.0003	0.1172 +/- 0.0001]

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[ 0.4070 +/- 0.0003 -0.2043 +/- 0.0003 0.0519 +/- 0.0001 ]
[ 0.4504 +/- 0.0004 0.5523 +/- 0.0003 0.2522 +/- 0.0001 ]
[ 0.1343 +/- 0.0004 0.0024 +/- 0.0004 -0.0527 +/- 0.0001 ]
[ -0.4500 +/- 0.0004 0.5331 +/- 0.0003 0.1791 +/- 0.0001 ]
[ -0.1848 +/- 0.0006 -0.0110 +/- 0.0006 0.5812 +/- 0.0001 ]
[ 0.0915 +/- 0.0004 0.0547 +/- 0.0004 -0.2022 +/- 0.0001 ]
[ 0.0225 +/- 0.0003 -0.2439 +/- 0.0003 -0.2196 +/- 0.0001 ]
[ 0.0959 +/- 0.0003 -0.0909 +/- 0.0003 -0.4589 +/- 0.0001 ]
[ 0.3186 +/- 0.0003 -0.2017 +/- 0.0003 0.3250 +/- 0.0001 ]
[ -0.3586 +/- 0.0004 0.0900 +/- 0.0003 0.3995 +/- 0.0001 ]
[ 0.2819 +/- 0.0003 0.1599 +/- 0.0003 0.3366 +/- 0.0001 ]
[ 0.2923 +/- 0.0003 -0.1070 +/- 0.0003 0.2257 +/- 0.0001 ]
[ 0.5682 +/- 0.0003 -0.1585 +/- 0.0003 0.2819 +/- 0.0001 ]
[ 0.2692 +/- 0.0004 -0.1432 +/- 0.0004 0.3907 +/- 0.0001 ]
[ 0.3959 +/- 0.0004 -0.0602 +/- 0.0004 0.1132 +/- 0.0001 ]
[ -0.1545 +/- 0.0004 -0.3243 +/- 0.0004 0.0315 +/- 0.0001 ]
[ 0.6506 +/- 0.0004 -0.2152 +/- 0.0004 0.0714 +/- 0.0001 ]
[ 0.1678 +/- 0.0008 0.1935 +/- 0.0006 0.3229 +/- 0.0001 ]
[ 0.3144 +/- 0.0003 -0.1971 +/- 0.0003 -0.4052 +/- 0.0001 ]
[ 0.4365 +/- 0.0004 0.0535 +/- 0.0003 -0.2883 +/- 0.0001 ]
[ 0.2625 +/- 0.0004 -0.1544 +/- 0.0004 0.0133 +/- 0.0002 ]
[ 0.2568 +/- 0.0004 -0.1032 +/- 0.0004 0.5576 +/- 0.0001 ]
[ 0.2177 +/- 0.0004 -0.1134 +/- 0.0004 0.2054 +/- 0.0002 ]
[ -0.0908 +/- 0.0005 -0.4413 +/- 0.0005 1.7317 +/- 0.0001 ]
[ 0.0914 +/- 0.0006 -0.2417 +/- 0.0007 3.1125 +/- 0.0001 ]
[ 0.4906 +/- 0.0012 -0.2459 +/- 0.0013 -2.8822 +/- 0.0002 ]
[ 0.1764 +/- 0.0007 0.3930 +/- 0.0007 -3.0318 +/- 0.0002 ]
[ 0.0453 +/- 0.0013 -0.1679 +/- 0.0015 3.0575 +/- 0.0002 ]
[ 0.6244 +/- 0.0007 -0.2241 +/- 0.0008 2.8688 +/- 0.0002 ]
[ 0.7910 +/- 0.0010 0.3331 +/- 0.0011 -2.8161 +/- 0.0003 ]
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[ -0.0466 +/- 0.0006      0.2210 +/- 0.0006      2.6333 +/- 0.0002 ]
[ -0.1158 +/- 0.0006     -0.1404 +/- 0.0006      2.8307 +/- 0.0002 ]
[ -0.6012 +/- 0.0012     -0.3399 +/- 0.0012      3.0210 +/- 0.0003 ]
[ -1.0113 +/- 0.0014     -0.4540 +/- 0.0019      2.7778 +/- 0.0007 ]
[ -0.5753 +/- 0.0009     -0.4389 +/- 0.0011      2.6012 +/- 0.0003 ]
[  0.1717 +/- 0.0006      0.2656 +/- 0.0006     -2.9976 +/- 0.0001 ]
[ -0.0691 +/- 0.0005     -0.1354 +/- 0.0006      1.8247 +/- 0.0002 ]
[ -0.0309 +/- 0.0018     -0.3823 +/- 0.0025      2.8483 +/- 0.0004 ]
[ -0.0811 +/- 0.0014     -0.2427 +/- 0.0016      3.0849 +/- 0.0003 ]
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Translation vectors (millimeters):

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[ -66.0213 +/- 0.2523    144.4816 +/- 0.2684    1242.8826 +/- 0.3065 ]
[ -261.4087 +/- 0.2491   -44.8588 +/- 0.2758    1241.8995 +/- 0.2890 ]
[ -609.8928 +/- 0.1951   -14.7806 +/- 0.2028      837.5432 +/- 0.2781 ]
[ -114.6676 +/- 0.2120  -163.5603 +/- 0.2309    1034.2836 +/- 0.2740 ]
[  328.3695 +/- 0.5599   -690.6180 +/- 0.6488    2780.8984 +/- 0.7435 ]
[ -1171.5273 +/- 0.6301  -152.4782 +/- 0.6083    2646.6588 +/- 0.8322 ]
[ -1523.6384 +/- 0.7024  -694.7750 +/- 0.6635    2687.4637 +/- 0.9340 ]
[ -615.6672 +/- 0.5679   -568.6057 +/- 0.6093    2579.4291 +/- 0.8036 ]
[  390.6779 +/- 0.2596   -161.4650 +/- 0.2728    1208.1928 +/- 0.3313 ]
[  201.5223 +/- 0.3045   -490.1155 +/- 0.3162    1415.4299 +/- 0.3107 ]
[ -295.9833 +/- 0.2233   -404.4217 +/- 0.2506    1058.5533 +/- 0.2964 ]
[ -728.7908 +/- 0.3198   -392.7073 +/- 0.3576    1580.5576 +/- 0.3467 ]
[ -808.1083 +/- 0.2753   -501.5824 +/- 0.3117    1322.1201 +/- 0.3398 ]
[ -388.8385 +/- 0.2147   -301.6175 +/- 0.2326     992.7878 +/- 0.2793 ]
[ -622.3019 +/- 0.2065   -256.1172 +/- 0.2334     964.3510 +/- 0.2905 ]
[ -819.1539 +/- 0.2507   -528.6723 +/- 0.2892    1186.7939 +/- 0.3452 ]
[ -782.3016 +/- 0.2239   -329.7720 +/- 0.2528    1002.5009 +/- 0.3261 ]
[  194.6544 +/- 0.3289   -652.6989 +/- 0.3454    1545.6100 +/- 0.3572 ]
[  249.9908 +/- 0.4231    433.0656 +/- 0.4562    2048.3723 +/- 0.6014 ]
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[ -386.5600 +/- 0.5031      413.8353 +/- 0.5711      2499.4481 +/- 0.5490 ]
[ -837.4735 +/- 0.4478      113.3663 +/- 0.4925      2183.4224 +/- 0.5952 ]
[  837.5883 +/- 0.4454     -157.4302 +/- 0.4485      1979.7010 +/- 0.6047 ]
[  901.5852 +/- 0.4203     -121.4416 +/- 0.4171      1825.7722 +/- 0.5638 ]
[  809.5825 +/- 0.4456      -46.4717 +/- 0.4501      1992.1303 +/- 0.6088 ]
[  273.8736 +/- 0.3654     -205.9075 +/- 0.3983      1781.7284 +/- 0.5276 ]
[ -1004.6991 +/- 0.4029     -246.8310 +/- 0.4419      1922.8067 +/- 0.4648 ]
[ -1581.7006 +/- 0.4167     -320.5431 +/- 0.4405      1754.4264 +/- 0.5667 ]
[ -1602.4130 +/- 0.4101     -376.6636 +/- 0.4408      1732.3128 +/- 0.5917 ]
[ -1447.4527 +/- 0.3780     -304.0550 +/- 0.4104      1614.7182 +/- 0.5606 ]
[ -1374.9315 +/- 0.4154     -796.1583 +/- 0.4513      1789.3429 +/- 0.5805 ]
[ -1564.1916 +/- 0.4210     -906.1228 +/- 0.4614      1747.0781 +/- 0.6093 ]
[ -1130.7070 +/- 0.4206     -893.1070 +/- 0.4678      1906.9453 +/- 0.5548 ]
[  -906.0905 +/- 0.3603     -698.9878 +/- 0.4069      1617.2642 +/- 0.5023 ]
[  -93.2322 +/- 0.4185     -802.4079 +/- 0.4620      2047.1744 +/- 0.5319 ]
[  515.9616 +/- 0.3931     -524.9292 +/- 0.4189      1811.8954 +/- 0.5492 ]
[  948.5683 +/- 0.4277     -654.5309 +/- 0.4328      1787.3529 +/- 0.5699 ]
[ -254.5112 +/- 0.5124      687.7200 +/- 0.5605      2503.1208 +/- 0.7666 ]
[  -89.8436 +/- 0.4949      298.8583 +/- 0.5418      2447.7065 +/- 0.7638 ]
[ -1375.3381 +/- 0.5492      513.3175 +/- 0.5827      2513.3367 +/- 0.7824 ]
[  -838.4649 +/- 0.6062      378.6255 +/- 0.5845      2611.5034 +/- 0.8518 ]
[ -1159.8539 +/- 0.6581      284.4389 +/- 0.6221      2758.3950 +/- 0.9224 ]
[ -1352.5636 +/- 0.7392      131.4690 +/- 0.6751      2961.7614 +/- 1.0712 ]
[ -1619.1063 +/- 0.7292        73.3703 +/- 0.6512      2804.8241 +/- 0.9466 ]
[ 1097.9295 +/- 0.5511      -71.4427 +/- 0.6186      2715.8501 +/- 0.7799 ]
[  326.0874 +/- 0.5371      -249.5185 +/- 0.5996      2650.5560 +/- 0.8912 ]
[ -311.3997 +/- 0.6278     -184.6890 +/- 0.6816      3060.7687 +/- 0.7386 ]
[ -881.1458 +/- 0.5935     -256.1144 +/- 0.5925      2634.8080 +/- 0.8021 ]
[ -1263.2067 +/- 0.6221     -635.8927 +/- 0.6036      2514.2564 +/- 0.8189 ]
[ -1376.8373 +/- 0.6569     -419.9967 +/- 0.6010      2502.5092 +/- 0.8823 ]
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[ -1270.9281 +/- 0.6621    -709.9858 +/- 0.6582    2810.0067 +/- 0.7459    ]
[  -103.7028 +/- 0.5746    -689.9556 +/- 0.6193    2761.0316 +/- 0.6458    ]
[ 1386.5393 +/- 0.4879    -319.1132 +/- 0.5538    2315.3734 +/- 0.6757    ]
[ 1684.6957 +/- 0.6647    -1195.2978 +/- 0.7254    2993.9068 +/- 0.8966    ]
[   371.6290 +/- 0.5658    -746.4943 +/- 0.6700    2802.0941 +/- 0.9649    ]
[   356.7158 +/- 0.5640    -739.8507 +/- 0.6590    2783.8605 +/- 0.8800    ]
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Camera 2 Intrinsic

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Focal length (pixels): [ 702.0270 +/- 0.1668    705.8385 +/- 0.1648    ]
Principal point (pixels):[ 624.2644 +/- 0.1419    363.5819 +/- 0.1571    ]
Radial distortion: [ -0.1720 +/- 0.0001    0.0269 +/- 0.0001    ]
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Position And Orientation of Camera 2 Relative to Camera 1

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Rotation of camera 2: [ -0.0016 +/- 0.0001    0.0176 +/- 0.0001    0.0009 +/- 0.0000    ]
Translation of camera 2 (meters):[ -119.6912 +/- 0.0210    -0.1118 +/- 0.0186    0.2123 +/- 0.0513    ]
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