FP 5

minXPrev	minXCurr	TTC	delta minX
7.974	7.913	12.9722	0.061
7.913	7.849	12.264	0.064
7.849	7.804	17.3422	0.045
7.804	7.744	12.9067	0.06
7.744	7.683	12.5951	0.061
7.683	7.581	7.43234	0.102
7.581	7.558	32.8612	0.023
7.558	7.515	17.4767	0.043
7.515	7.468	15.8894	0.047
7.468	7.414	13.7297	0.054
7.414	7.344	10.4914	0.07
7.344	7.273	10.2436	0.071
7.273	7.195	9.22441	0.078
7.195	7.136	12.0949	0.059
7.136	7.042	7.49146	0.094
7.042	6.972	9.96004	0.07
6.972	6.897	9.19596	0.075
6.897	6.815	8.311	0.082

The values highlighted in red looks off, however, it just means the car is slowing down and it takes longer for collision to occur. The smaller the difference the higher the TTC.

FP 6

camera TTC	ratio
13.0126	1.00768
13.9229	1.00718
13.101	1.00763
15.9091	1.00629
15.3344	1.00652
14.9812	1.00668
15.7693	1.00634
15.2449	1.00656
15.5669	1.00642
12.2208	1.00818
12.1519	1.00823
12.03	1.00831
9.85925	1.01014
9.70959	1.01030
10.7058	1.00934
10.5783	1.00945
9.7031	1.01031
8.85196	1.01130

Similar to lidar, the smaller the ratio, the higher the TTC.

Detector/Descriptor

AKAZE, BRISK was used to calculate the camera TTC.

Camera TTC	Lidar TTC
13.0126	12.9722
13.9229	12.264
13.101	17.3422
15.9091	12.9067
15.3344	12.5951
14.9812	7.43234
15.7693	32.8612
15.2449	17.4767
15.5669	15.8894
12.2208	13.7297

12.1519	10.4914
12.03	10.2436
9.85925	9.22441
9.70959	12.0949
10.7058	7.49146
10.5783	9.96004
9.7031	9.19596
8.85196	8.311

I took the standard deviation of the TTC values for all combinations because I wanted to see how much the TTC varies. Those that contains values 30 or higher leads to higher standard deviation. Those with high standard deviations are ignored.

Although FAST, FREAK gave the lowest standard deviation, **AKAZE, BRISK** was chosen. **AKAZE, BRISK** was chosen because it is the third lowest standard deviation and its camera TTC values are closest to lidar TTC values.