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VII. APPENDIX

The 100 accident cases selected for this research are described below. The first 40 cases are from the database of IFSTTAR-LMA and the remaining from CASR. They are described according to the different components of a crash: the road environment, driver, vehicle and the pedestrian. The description includes the time when the crash occurred (D:Daytime or N:Nighttime), the light condition (BC: bad condition as heavy rain or dazzling), road condition (Wet: wet road), road curvature (LT: Left Turn or RT: Right Turn), obstacles that mask the pedestrian from sight view of the detection systems, the reaction of the driver (B: Brake; S: Steer; B+S: Brake and steer), the travel and impact speed of the vehicle, the pedestrian velocity corresponding to his age and pace (W: Walking; W f.: Walking fast; R: running) and the impact configuration (F: Front or S: Side impact).

TABLE A.I
SUMMARY OF THE 100 ACCIDENT CASES

Case	Environment					Driver	Vehicle		Pedestrian			Impact config.
	Day/Night	Light Cond.	Road Cond.	Road curve	Obstacles masking	React.	Travel Speed (km/h)	Impact Speed (km/h)	Age	Pace	Speed (m/s)	
1	D					B + S	45,5	32	52	R	2,83	F
2	N+L*		Wet				50	50	40	W	1,62	F
3	D					B	42,4	10	12	R	1,68	F
4	D					B	117,6	86	66	R	2,47	F
5	N+L					B	75,2	45	79	W	1,07	F
6	D			LT			0	22	17	W	1,65	F
7	N					S	130	130	33	W	1,62	F
8	D			LT			11,1	20	79	W	1,07	S
9	D						53	53	74	W	1,28	F
10	D						55	55	86	W	1,07	F
11	D						50	50	79	W	1,28	F
12	D				Vehicle		35	35	62	W	1,46	F
13	D						30	30	65	W	1,28	S
14	D			LT			2,1	15	76	W	1,28	F
15	D	BC			Tree	B	44,7	40	85	W	1,28	F
16	D				Vehicle	B	39,9	5	27	W	1,62	F
17	N+L					B	33,9	27	69	W	1,28	F
18	N+L						40	40	40	W	1,62	F
19	D	BC	Wet	LT		B	22	8	51	W	1,52	F
20	D			LT			20	20	64	W	1,46	F
21	D+L**				Vehicle	B	43,3	10	21	W	1,62	S
22	D				Vehicle		40	10	15	R	4,2	S
23	D+L	BC	Wet				35	35	17	W	1,65	F
24	D	BC					50	50	69	W	1,28	F
25	D						30	30	77	W	1,28	S
26	D			LT			35	35	60	W	1,46	F
27	N+L					B	38,3	3	82	W	0,5	F
28	D						30	30	70	W	1,28	F
29	D						30	30	73	W	1,28	F
30	D				Vehicle		20	20	60	Stat	0	S
31	D				Bus	B	39,7	17	6	R	3,94	F
32	D			RT			20	20	14	W	1,68	F
33	D				Vehicle	B	34,7	5	5	R	3,94	F
34	N+L					B	55	15	11	R	4,2	F
35	D					B	36,3	11	37	W	1,34	F
36	D						22	22	19	W	1,65	F
37	D	BC					36	36	68	W	1,28	F
38	D						5	5	24	W f.	2,8	S
39	D	BC	Wet	RT	Billboard		30	30	10	R	4,2	F
40	D	BC					30	30	82	W	1,07	F
41	D						35	35	21	W	1,62	S
42	D				Vehicle		45	45	13	R	4,2	F
43	D						55	55	75	W	1,46	S
44	D						40	40	29	R	4,2	F
45	D	BC		RT			20	20	75	W	1,28	F
46	D					B + S	53,4	30	75	W	1,28	F
47	D		Wet			B + S	56,4	44	47	R	2,9	F
48	D				Bus		40	40	13	R	4,2	S
49	N+L						60	60	24	W	1,4	F
50	D		Wet		Vehicle		20	20	18	W	1,65	F

Case	Environment					Driver	Vehicle		Pedestrian			
	Day/Night	Light Cond.	Road Cond.	Road curve	Obstacles masking	React.	Travel Speed (km/h)	Impact Speed (km/h)	Age	Pace	Speed (m/s)	Impact config.
51	D						50	50	47	R	2,9	F
52	D				Bin		35	35	3	R	2,41	F
53	D					B	55,7	30	50	W	1,52	F
54	D		Wet		Vehicle		35	35	14	R	4,2	F
55	D				Vehicle	B	65,5	40	38	W	1,62	F
56	D						47	47	16	W	1,65	S
57	D					B	58,9	14	57	Stat	0	F
58	D			RT			0	43,1	71	W	1,28	F
59	D					B	42,7	29	45	W	1,52	F
60	N+L					S	60	60	17	W	1,65	F
61	D				Bus	B	43,1	36	14	W	1,68	F
62	D				Vehicle	S	25	25	19	W	1,65	F
63	D						60	60	16	W	1,65	S
64	D					B	56,1	22	6	R	3,94	F
65	D				Vehicle		17	17	11	R	4,2	F
66	D						58	58	89	W	1,28	F
67	D						30	30	67	W	1,28	F
68	N+L						43	30	35	R	3,35	S
69	N+L						37	37	35	Stat	0	F
70	N+L						47	47	28	R	3,54	F
71	D					B + S	46,2	36	65	W	1,28	F
72	N+L		Wet				50	50	67	W	1,28	F
73	D					B	50,9	31	18	W	1,46	F
74	D			RT			15	15	65	W	1,28	F
75	N+L		Wet	RT			15	15	24	W	1,62	F
76	N+L				Pole		62	62	44	W	1,62	F
77	D					B + S	48,2	21	76	W	1,28	F
78	D					B	62,6	27	80	W	1,28	F
79	D						60	50	30	W	1,62	F
80	D						35	35	67	R	2,71	F
81	D		Wet			B + S	49,5	5	7	R	3,94	F
82	D	BC	Wet				41,8	41,8	82	W	1,28	F
83	D						55	55	13	W	1,68	F
84	N+L			RT			20	20	53	W	1,52	F
85	D				Vehicle		14,4	25	19	R	4,2	F
86	D	BC		RT			30	30	78	W	1,28	F
87	D				Vehicle	B	27,3	12	20	R	3,54	F
88	D						40	40	23	W	1,62	F
89	D		Wet			B + S	49,1	30	48	R	2,9	F
90	D			LT			15	15	50	W	1,52	S
91	D	BC		LT			15	15	33	W	1,62	F
92	N+L						50	50	39	W	1,62	F
93	D		Wet			S	29,6	20	19	W	1,65	S
94	D						30	20	17	W	1,65	F
95	D				Vehicle	B + S	55,1	20	58	W	1,46	F
96	D					B	35,1	10	30	W	1,62	F
97	D		Wet	RT			20	20	41	W	1,62	F
98	D					B	94,3	49	84	W	1,28	F
99	D					B + S	47,7	30	73	W	1,28	F
100	D			LT			7,9	15	9	R	3,94	S

* Night time with street lights

** Dawn