

Lab 4 (30.09.2016)

- 1) Create a set of 25 rules of all combination of {speed = very slow, slow, medium, fast, very fast} and {distance = very short, short, medium, long, very long}. Brake is reasonably specified by myself.

RULES		
IF SPEED IS	AND DISTANCE IS	THEN BRAKE IS
Very slow	Very small	Weak
Very slow	Small	Weak
Very slow	Medium	Very weak
Very slow	Long	Very weak
Very slow	Very long	Very weak
Slow	Very small	Medium
Slow	Small	Weak
Slow	Medium	Very weak
Slow	Long	Very weak
Slow	Very long	Very weak
Medium	Very small	Strong
Medium	Small	Medium
Medium	Medium	Medium
Medium	Long	Weak
Medium	Very long	Very weak
Fast	Very small	Strong
Fast	Small	Strong
Fast	Medium	Medium
Fast	Long	Medium
Fast	Very long	Weak
Very fast	Very small	Very strong
Very fast	Small	Very strong
Very fast	Medium	Strong
Very fast	Long	Medium
Very fast	Very long	Weak

- 2) Get de-fuzzified brake value for all 25 combinations of speed = 0, 5, 10, 15, 20 and distance = 0, 250, 500, 750, 1000.

Speed	Distance	Brake
0	0	3
0	250	2,2857
0	500	0,875
0	750	0,875
0	1000	0,875
5	0	4,0625
5	250	2,2857
5	500	0,875
5	750	0,875
5	1000	0,875
10	0	6
10	250	4,5
10	500	3,625
10	750	1,2143
10	1000	0,875
15	0	7,125
15	250	6,8846
15	500	5,0833
15	750	3,2353
15	1000	3
20	0	8,6364
20	250	8,3243
20	500	5,375
20	750	3,2353
20	1000	3

3) Show 25 points in 3D coordinate

