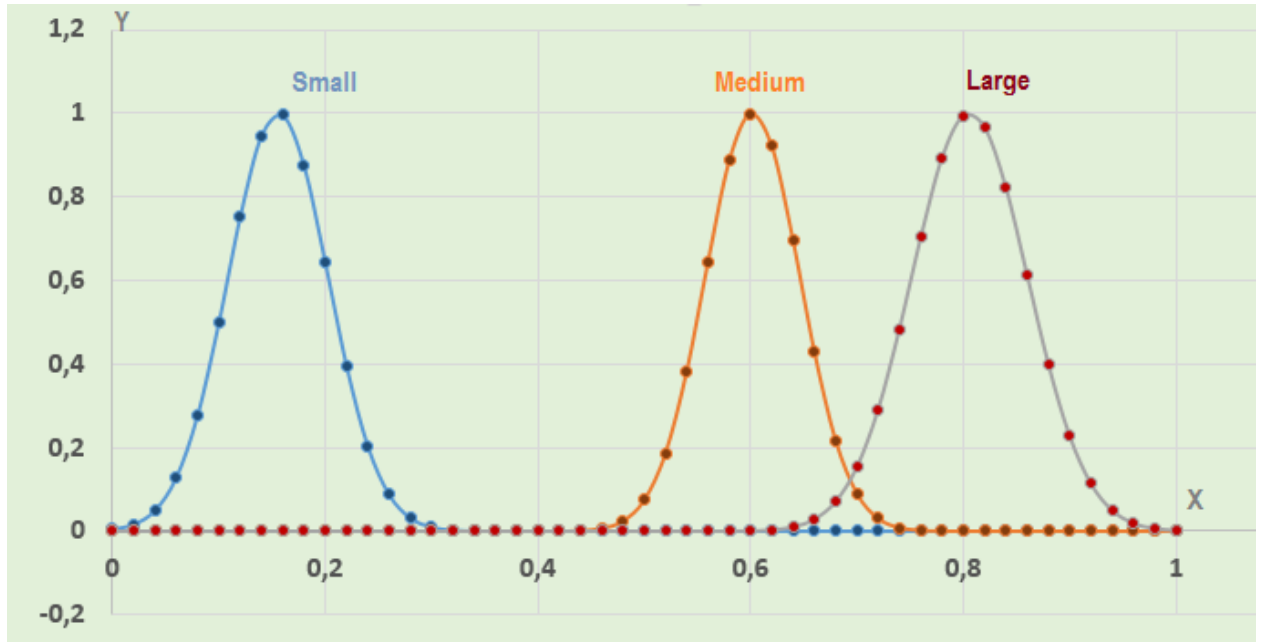


CCOD
Lab 6 08.10.2016

Akira Imada

Student – Aleksey Trotsiuk (AS - 36)

Below you can see 3 Gaussian Membership Function of small, medium and large x-y coordinate:



I've created 3 rules for each family A, B, C:

Rule 1: If x_1 =large; x_2 =medium; x_3 =small; x_4 =small, then Family A.

Rule 2: If x_1 =large; x_2 =large; x_3 =large; x_4 =large, then Family B.

Rule 3: If x_1 =large; x_2 =medium; x_3 =large; x_4 =large, then Family C.

Data to evaluate

Iris Flower Database to validate

Setosa				Versicolor				Virginica			
x_1	x_2	x_3	x_4	x_1	x_2	x_3	x_4	x_1	x_2	x_3	x_4
0.65	0.80	0.20	0.08	0.89	0.73	0.68	0.56	0.80	0.75	0.87	1.00
0.62	0.68	0.20	0.08	0.81	0.73	0.65	0.60	0.73	0.61	0.74	0.76
0.59	0.73	0.19	0.08	0.87	0.70	0.71	0.60	0.90	0.68	0.86	0.84
0.58	0.70	0.22	0.08	0.70	0.52	0.58	0.52	0.80	0.66	0.81	0.72
0.63	0.82	0.20	0.08	0.82	0.64	0.67	0.60	0.82	0.68	0.84	0.88
0.68	0.89	0.25	0.16	0.72	0.64	0.65	0.52	0.96	0.68	0.96	0.84
0.58	0.77	0.20	0.12	0.80	0.75	0.68	0.64	0.62	0.57	0.65	0.68
0.63	0.77	0.22	0.08	0.62	0.55	0.48	0.40	0.92	0.66	0.91	0.72

Below you can see evaluated rules

Data №:	Family A	Family B	Family C	Result:
№ 1	A	B	B	Not Good
№ 2	A	B	C	Good
№ 3	A	B	C	Good
№ 4	A	B	C	Good
№ 5	A	B	C	Good
№ 6	Other	B	B	Not Good
№ 7	A	B	C	Good
№ 8	A	Other	C	Not good
Success Rate:	87.5%	87.5%	75%	62.5%