Conteporarry Data Processing Technology(CCOD)
Lab 7(October 15,2016)
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Table of Rules

if x1	and x2	and x3	and x4	then
medium	large	small	very small	Setosa
large	large	medium	medium	Versicolor
very large	very large	very large	large	Virginea

Membership Function for Very Small: $e^{\frac{-(x-0.143667)^2}{0.00385}}$

Membership Function for Small: $e^{\frac{-(x-0.318571)^2}{0.005069}}$

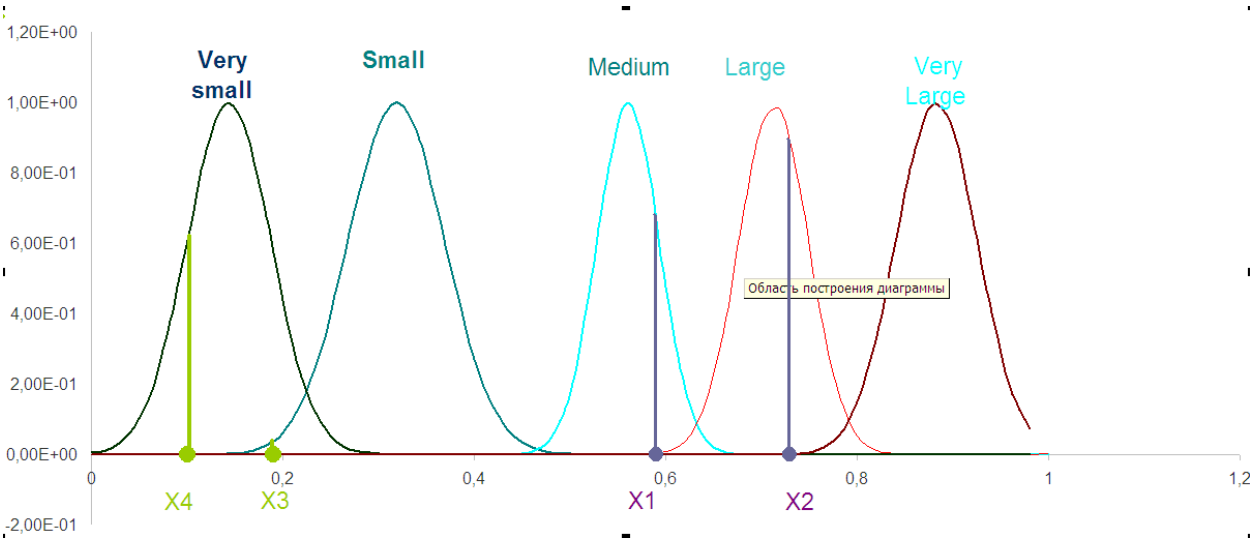
Membership Function for Medium: $e^{\frac{-(x-0.560488)^2}{0.002102}}$

Membership Function for Large: $e^{\frac{-(x-0.712558)^2}{0.002626}}$

Membership Function for Very Large: $e^{\frac{-(x-0.88275)^2}{0.003615}}$

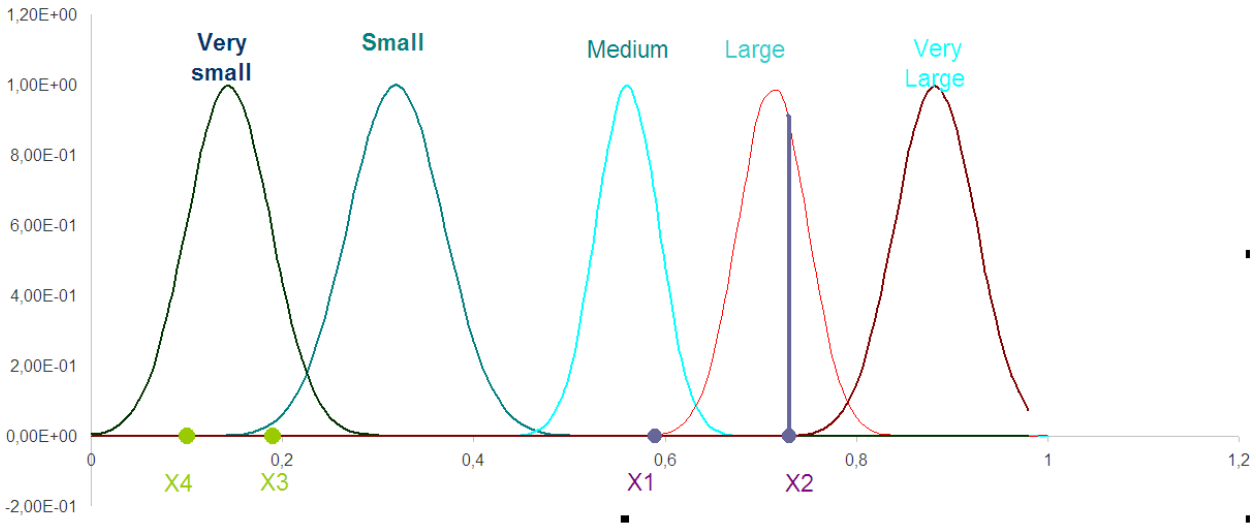
x1 = 0.63 x2 = 0.77 x3 = 0.22 x4 = 0.08 It is a setosa

Rule 1: x1-medium; x2- large; x3-small ;x4- very small.



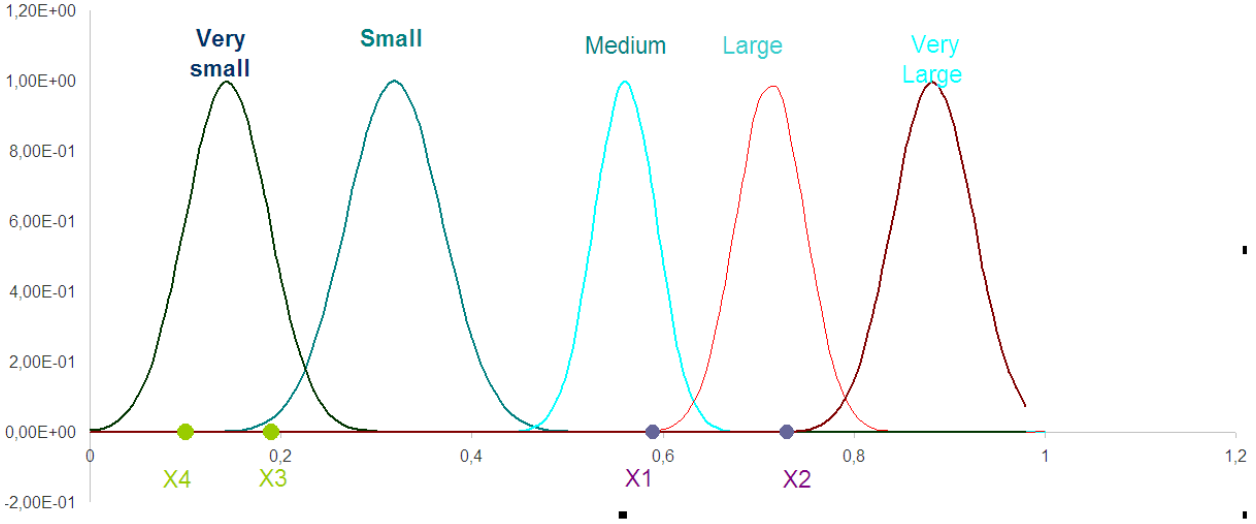
M = 0.10040762012184973 x 0.2846506508158262 x 0.14709646739297724 x 0.34893378632011085 = 0.0014669797557916614

Rule 2: x1- large; x2- large; x3- medium ;x4- medium.



M = 0.07460779802175828 x 8.543615044442508e-10 x 1.1209270919925816e-24 x 2.0173743543404573e-48 = 1.4414173846230958e-82

Rule 3: x1- very large; x2- very large; x3- very large ;x4- large.



M = 2.114567538599145e-8 x 0.2846506508158262 x 1.7001942874267777e-53 x 3.8159966380221206e-78 = 3.905173000899411e-139

y = 0.0014669797557916614 / 0.0014669797557916614 = 1