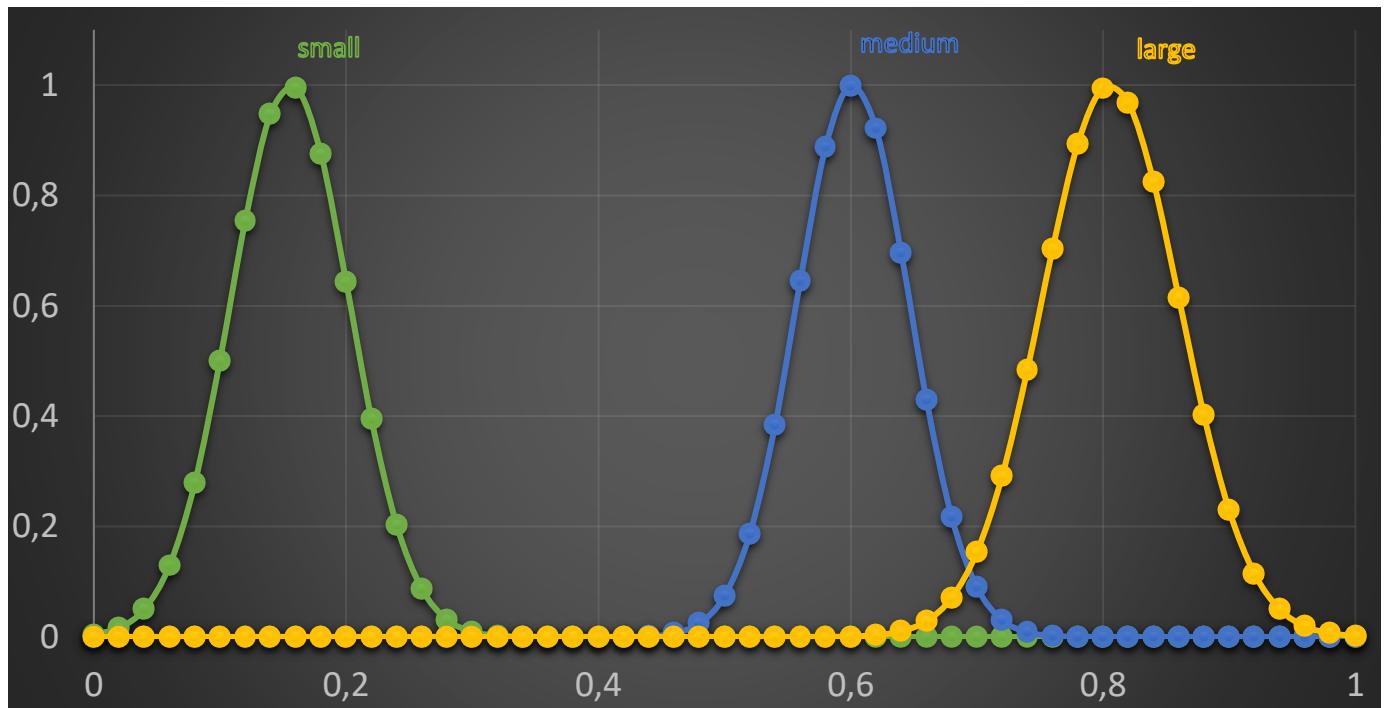


The Gaussian membership functions of small, medium, and large:



My 3 rules for each family:

1. If  $x_1 = \text{Medium}$  and  $x_2 = \text{medium}$  and  $x_3 = \text{small}$  and  $x_4 = \text{small}$  then A.
2. If  $x_1 = \text{large}$  and  $x_2 = \text{medium}$  and  $x_3 = \text{medium}$  and  $x_4 = \text{medium}$  then B.
3. If  $x_1 = \text{large}$   $x_2 = \text{medium}$   $x_3 = \text{large}$   $x_4 = \text{large}$  then C.

Checking own rules , good or not:

No.	Family A		Family B		Family C		
	Rule 1		Rule 2		Rule 3		
	No.	A or B or C or other					
№1		other		B		C	not good
№2		A		B		C	good
№3		A		B		C	good
№4		A		B		C	good
№5		other		B		C	not good
№6		other		B		C	not good
№7		A		B		B	not good
№8		A		other		C	not good
success rate		62,50%		87,5%		87,5%	37,50%