Five Activation Functions (argument x range - [-10;10]) painted using matlab code: $t_saw = (-2) : 0.01 : 0;$

k = (-2-0)/(-2-0)

delay = 0;

$y_saw = k * (t_saw - delay);$

$plot(t_saw, y_saw, 'k')$

hold on

$t_sin = (-2) : 0.01 : 2;$

A0 = 0.5;

A = 0.5;

T = (3-(-3))/(1/3);

f = 1/T;

delay = 0;

$y_sin = A0 + A * sin(2 * pi * f * (t_sin - delay));$

$plot(t_sin, y_sin, 'r')$

$t_sin = (-2) : 0.01 : 2;$

A0 = 0;

A = 1;

T = (2-(-2))/(1/2);

f = 1/T;

delay = 0;

$y_sin = A0 + A * sin(2 * pi * f * (t_sin - delay));$

$plot(t_sin, y_sin, 'b')$

$t_const1 = 0 : 0.01 : 1;$

$y_const1 = 0 * ones(size(t_const1));$

$t_const2 = 1 : 0.01 : 2;$

$y_const2 = 1 * ones(size(t_const2));$

$t_const = [t_const1, t_const2];$

$y_const = [y_const1, y_const2];$

$plot(t_const, y_const, 'g')$

$t_constr = (-2) : 0.01 : 0;$

$y_constr = 0 * ones(size(t_constr));$

$t_sawr = 0 : 0.01 : 2;$

k = (0-2)/(0-2)

delay = 0;

$y_sawr = k * (t_sawr - delay);$

$t_relu = [t_constr, t_sawr];$

$y_relu = [y_constr, y_sawr];$

$plot(t_relu, y_relu, 'm')$

axis([-2 2 -2 2])

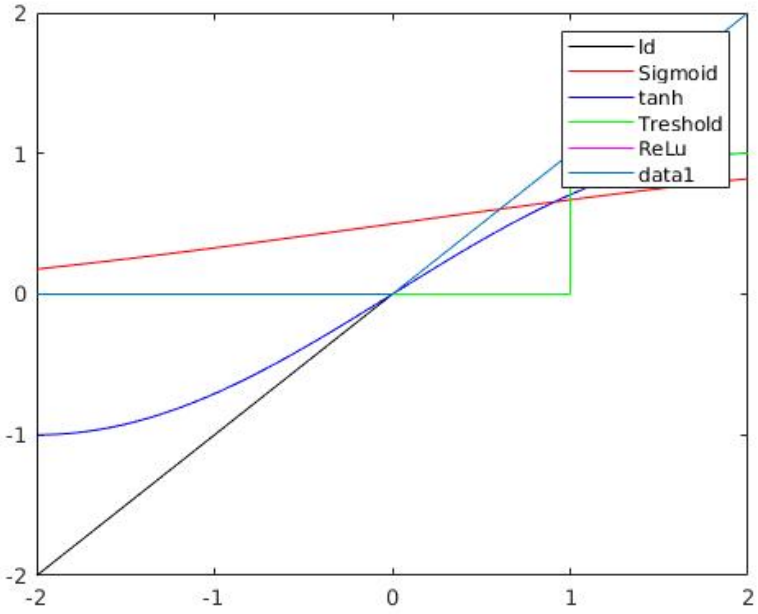
legend('ld', 'Sigmoid', 'tanh', 'Treshold', 'ReLu')

z=$plot(t_relu, y_relu)$

za = get(z, 'Parent');

set(za, 'XTick', [-2 -1 0 1 2]);

set(za, 'YTick', [-2 -1 0 1 2]);


Id
Sigmoid
tanh
Treshold
ReLu
data1
2
1
0
-1
-2
-2
-1
0
1
2