NNFL EXPT. 08

Code:

clc;

clear all;

close all;

A=[rand(1,100);rand(1,100)];

B=[rand(1,100);-rand(1,100)];

C=[-rand(1,100);rand(1,100)];

D=[-rand(1,100);-rand(1,100)];

P=[A(:,1:80) B(:,1:80) C(:,1:80) D(:,1:80)];

Aout=[1;0;0;0];

Bout=[0;1;0;0];

Cout=[0;0;1;0];

Dout=[0;0;0;1];

axis([-1 1 -1 1])

hold on

plot(A(1,:),A(2,:),'\*')

plot(B(1,:),B(2,:),'^')

plot(C(1,:),C(2,:),'O')

plot(D(1,:),D(2,:),'.')

text(0.5,0.5,'Class A')

text(0.5,-0.5,'Class B')

text(-0.5,0.5,'Class C')

text(-0.5,-0.5,'Class D')

for i=1:316

if i<=79

Aout=[Aout,[1;0;0;0]];

elseif i<=158

Bout=[Bout,[0;1;0;0]];

elseif i<=237

Cout=[Cout,[0;0;1;0]];

else

Dout=[Dout,[0;0;0;1]];

end

end

T=[Aout Bout Cout Dout];

net=newrbe(P,T);

A1=A(:,81:100);

y=sim(net,A1);

view(net);

Output:





