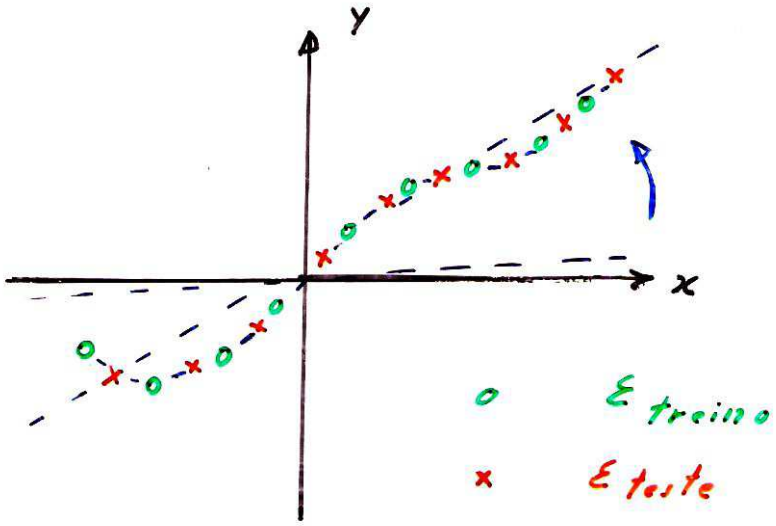
A rede neural como um aproximador (saídas contínuas)

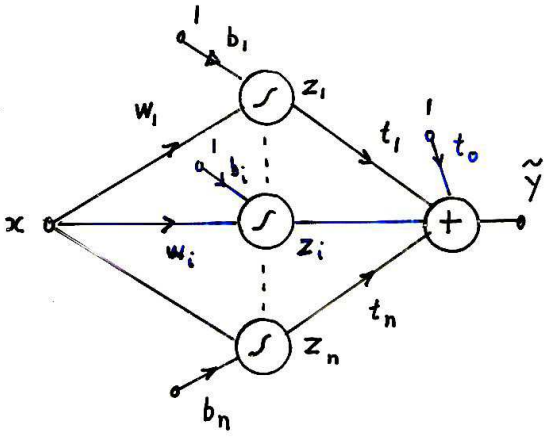
Demo Aproximador

$\underline{y} = \varphi(\underline{x})$ $\quad$ $\underline{\tilde{y}} = \varphi(\underline{x})$

$y = \varphi(x)$ $\quad$ $\tilde{y} = \varphi(x)$

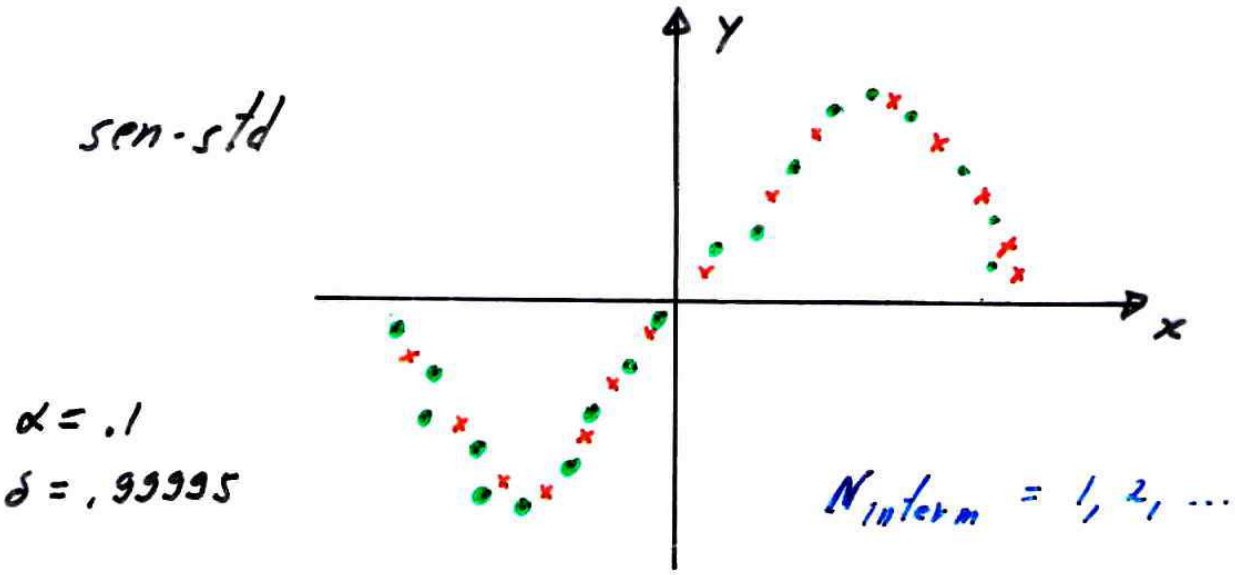


Rede Neural



numero de neurônios na camada intermediária ajustável
passo treinamento α ajustável
decaimento do passo α ajustável
valores iniciais ajustáveis

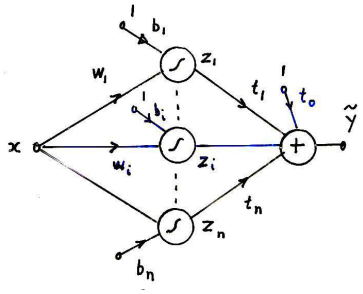
Exemplo 1



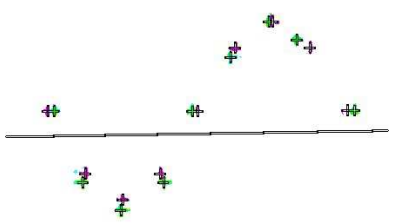
Evolução do treinamento e

Efeito do numero de neurônios na camada intermediaria

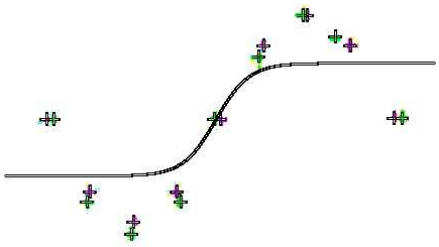
1 neurônio na camada intermediária



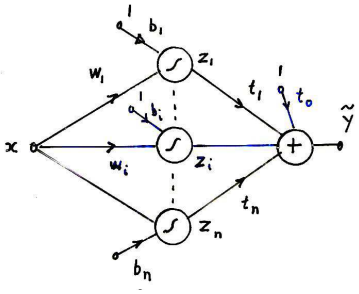
Inicio do treinamento



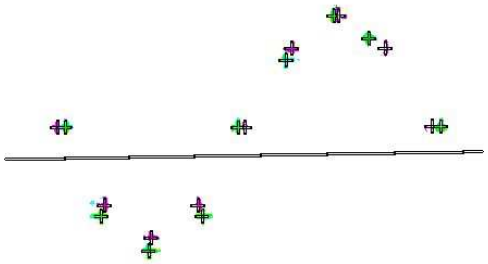
Fim do treinamento



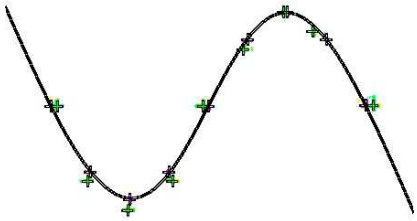
3 neurônios na camada intermediária



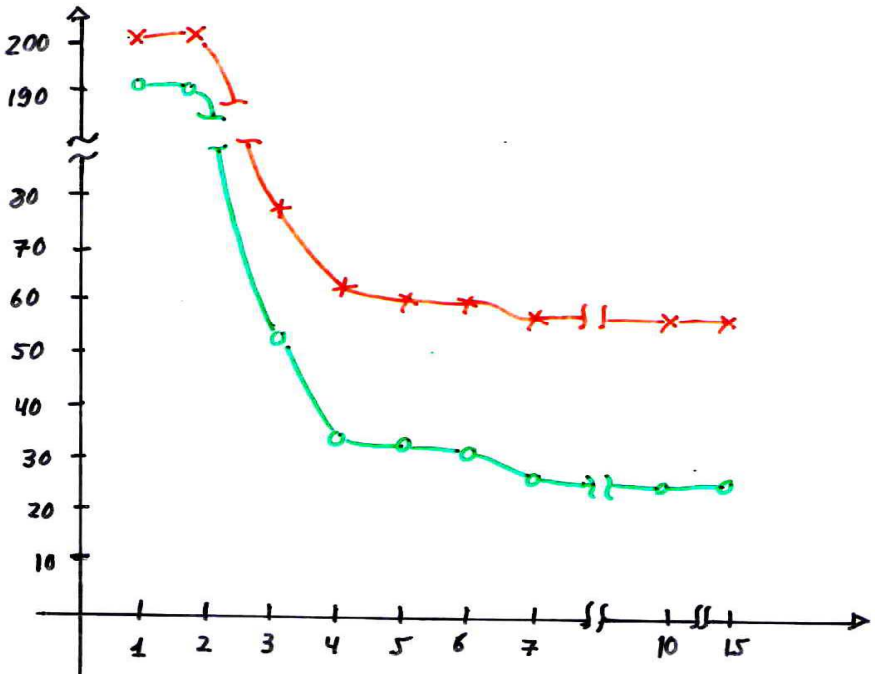
Inicio do treinamento



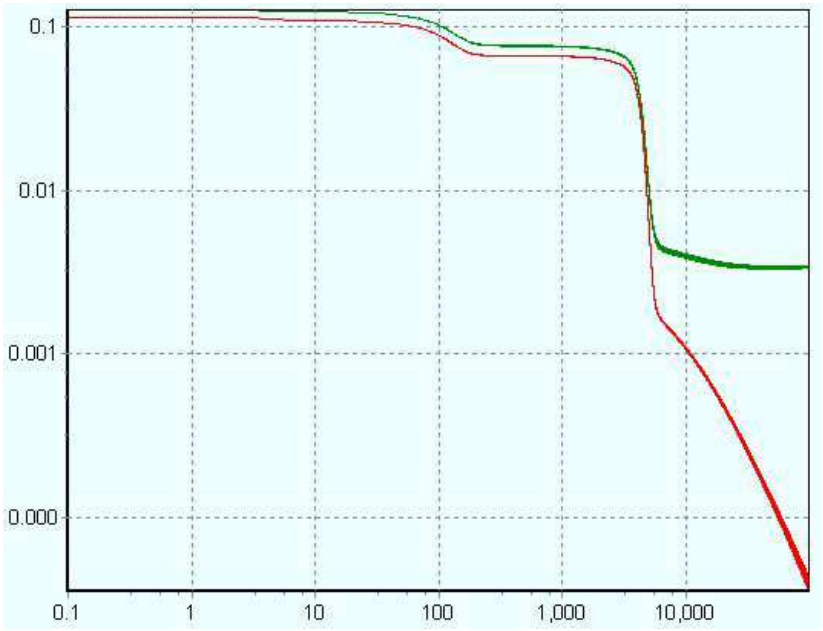
Fim do treinamento



Erro final vs número de neuronios



Evolução do erro ao longo do treinamento

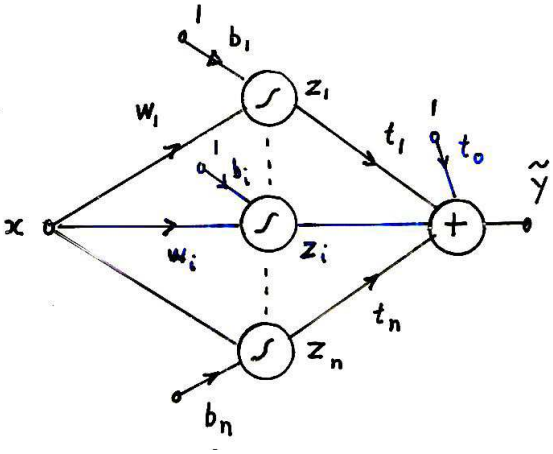


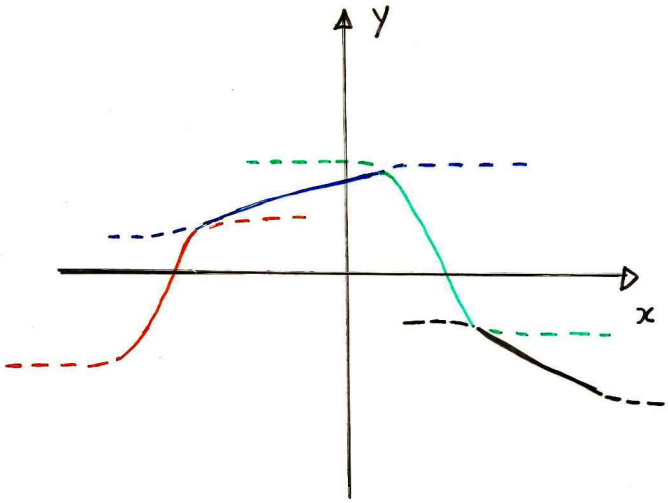
Erro vs passo

Decaimento do passo

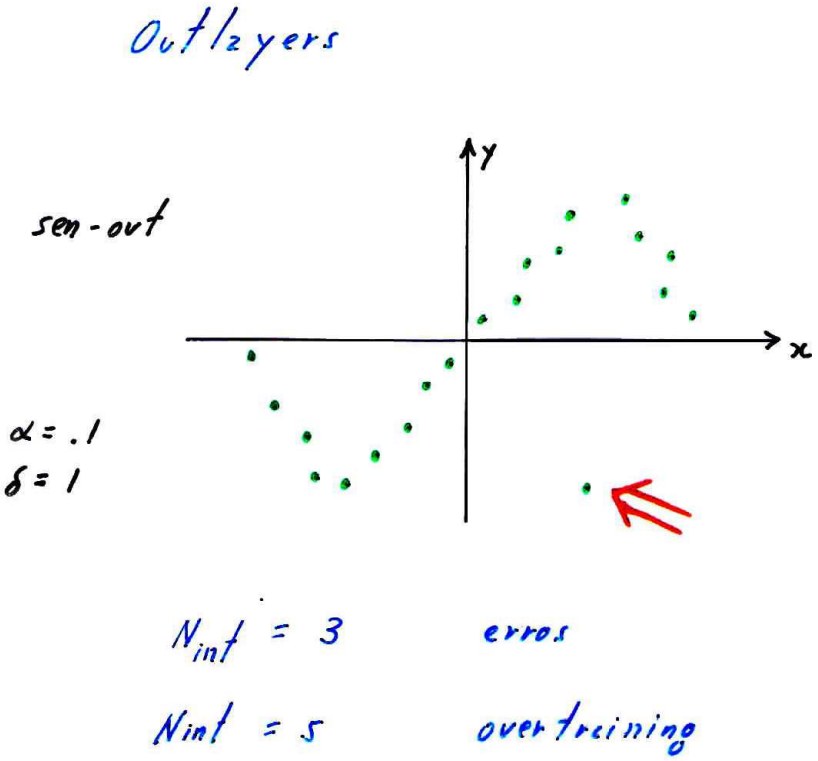
Overtraining

Composição da saída





Efeito de Outlayers



Mínimos locais