Auto-Encoder:

Attributs:

<u>n_visible</u> (int) number of neuron in the input layer

<u>To share value</u>

<u>n hidden</u>: *(int)* number of neuron in the hidden layer

<u>tied weight</u> (Boolean) if true then W2 = W1.T

encoder activation function: (String) Activation function for the hidden layer

decoder activation function: (String) Activation function of the reconstruction layer

W1, W2, b1, b2: (theano.tensor.TensorType) Weights of the network

<u>inputs</u>: (theano.tensor.TensorType) Symbolic variable for the inputs

theta: (list of theano.tensor.TensorType) theta = [W1, W2, b1, b2]

Methods:

<u>init</u> <u>encoding pass</u> <u>jacobian computation</u> <u>backpropagation</u> <u>vizualise learning</u> <u>decoding pass</u> <u>to vector</u> <u>train AE</u> <u>reconstruct</u>