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function [y,ty] = nconv(x,tx,h,th)
% Description:
% nconv performs a numerical approximation to the
% continuous time convolution using matlab's conv()
% function
%
% [y,ty] = nconv(x,tx,h,th)
%
% Inputs:
%     x -- input signal vector
%     tx -- times of samples in x
%     h -- impulse response vector
%     th -- times of samples in h
%
% Outputs:
%     y -- output signal vector
%         lenght(y) = length(x) + length(h) - 1
%     ty -- times of samples in y
% Written by Javier Palomares 01/28/13

% Sampling period
T = th(2) - th(1);

% start and end times
tStart = tx(1) + th(1);
tEnd = tx(length(tx)) + th(length(th));

% Convolution
y = conv(x, T .* h);
% Time spaces
ty = linspace(tStart,tEnd,length(y));

      Error using nconv (line 23)
      Not enough input arguments.

```

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