Computer Lab Assignment - 04 - Spring 2020

Signals & Systems, Anish Turlapaty PhD, Indian Institute of Information Technology Sri City, Sri City, Andhra Pradesh

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1. Write a matlab code for linear convolution of two time-limited continuous signals and demonstrate its application on the following pair of signals along with a theoretical validation

$$x(t) = exp(-2t)(u(t) - u(t-4))$$

and

$$h(t) = \begin{array}{ccc} 1-t & 0 \leq t < 1 \\ t-1 & 1 \leq t < 2 \\ 0 & elsewhere \end{array}$$

2. Use the same convolution function to convolve the following signals. (Theoretical verification is not necessary)

$$x(t) = \ln(t)(u(t) - u(t-3))$$

and

$$h(t) = \exp(-t)(u(t) - u(t-4))$$

Merge all the sections into a single pdf file and upload.