WAVELETS AND MULTIRATE DIGITAL SIGNAL PROCESSING

Lecture 22: Reconstruction and Admissibility

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Self Evaluation Quizzes

Q 1. Why do we need scale factor $f(s_0)$ while reconstructing from CWT? **Ans.** The freedom to choose the scale factor $f(s_0)$ makes the integral in equation 20 independent of the frequency and hence is very important in the process of the reconstruction.

Q 2. What is the constraint on the window function for reconstruction from STFT? **Ans.** We can see in equation-10 of lecture script, while reconstructing from STFT we get $||v||^2 \times x(t)$. Hence, we will get perfect reconstruction only if L_2 norm of window function v(t) is finite i.e. $v(t) \in L_2(\mathbb{R})$.