29-4-2021

App Signal Processing

→ take signal as input → generat Output graph(signal)

Grip ⇒ Select as many No of Display on Screen. (By using no of cell in grid).

→ each cell Represent no of window like (figure window).

→ one figure Window = one cell of grid

it execute on Matlab → display in workspace.

→ it importe only those variables that are By Default of signal type.

→ it Break it into column (Filter signal) each coloum is one signal.

one Dimentia جس کی signal اسیا (column vector) column one زیادہ ہوگی اس کو میں select کرتا ہے

if Make A matrix as small column vectors.

A = 225 x 225

✓ A[:,1] all row of column one.

A[2,1] all column of Row 2.

each vector is a Signal in term of calculation.

we work in Sampling.

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it A Matrix have 225 samples-
Sample (one continus signal ko sample لیا گیا
(specific interval)-

Operation: (8 different types)

1) Smooth: apply apply on all value of vector- (it Remove variation/noice/ Randomness)- (8 different types—
i) Movmean (ii) Movmedian-
smoothing process varry from function to function

extreme ends

2) Low pass: Low frequency are pass But high frequency are stop.
should have Range (0 - 70) Band

3) high pass: high freqvencay signal are allowed to pass and lower frequency Signal are stop in fiter-
should have Range (Band) (70 - 100)-

4) Band pass: low pass and high pass.
Range is Discard only centeral
Range is pass. (40 - 50) Rang is Band is pass
while (0 - 40) Band and (51 - 100) (Band) are Discard-

5) Band Stop: opposit to Band pass-
(40 - 50) is Discard while less then 40 and greater 50 are passed throvgh filters-

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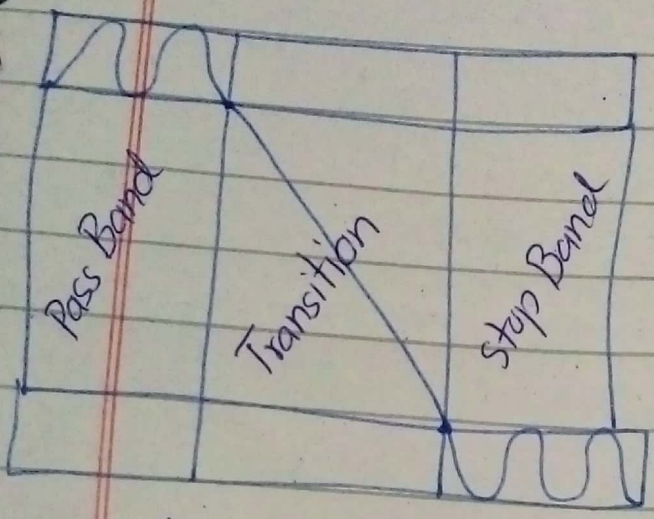

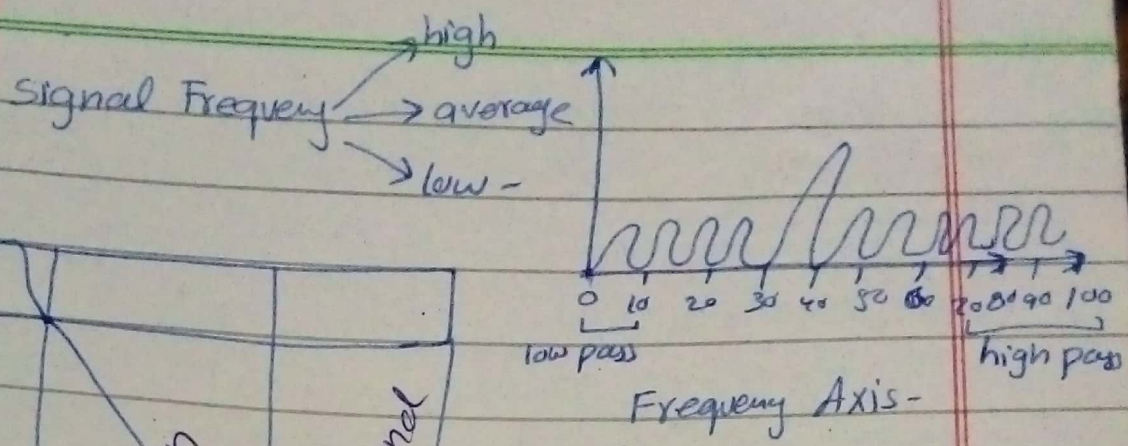

steepness (transition is trickey) (it takes time to implement).

اس میں جہاں end Band one ہونا ہے اور start Band second اس ہونا ہے (it should) zero value سے شروع نہیں ہونی me more then 0 -

- اگر width زیادہ ہوگی تو steepness کم ہوگی ←
- اگر width کم ہوگی تو steepness زیادہ ہوگی ←

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