

M-point moving-average system

Clean the signal distorted by the noise designing two Simulink systems.

System 1

$$y[n] = \frac{1}{M} \sum_{k=0}^{M-1} x[n-k]$$

System 2

$$y[n] = y[n-1] + \frac{x[n]}{M} - \frac{x[n-M]}{M}$$

Parameters

- Set M=32
- Load the file *.mat*

Clear

```
clc;           % 'clc' cleras all the text from the Command Window
clear;         % 'clear' removes all variables from the current workspace
close all;     % 'close all' deletes all figures whose handles are not hidden.
```

Parameters

Load the parameters from the mat file

```
load ex02_data.mat

Ts = 1/Fs;
M = 32;
h = ones(1,M);
```