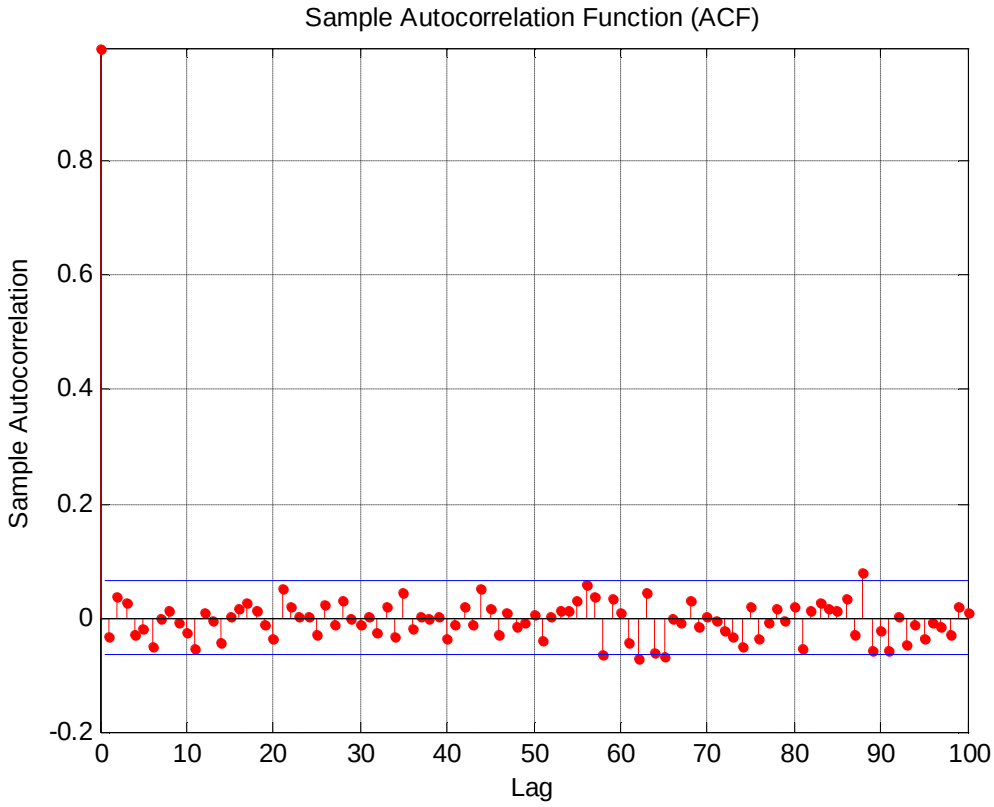
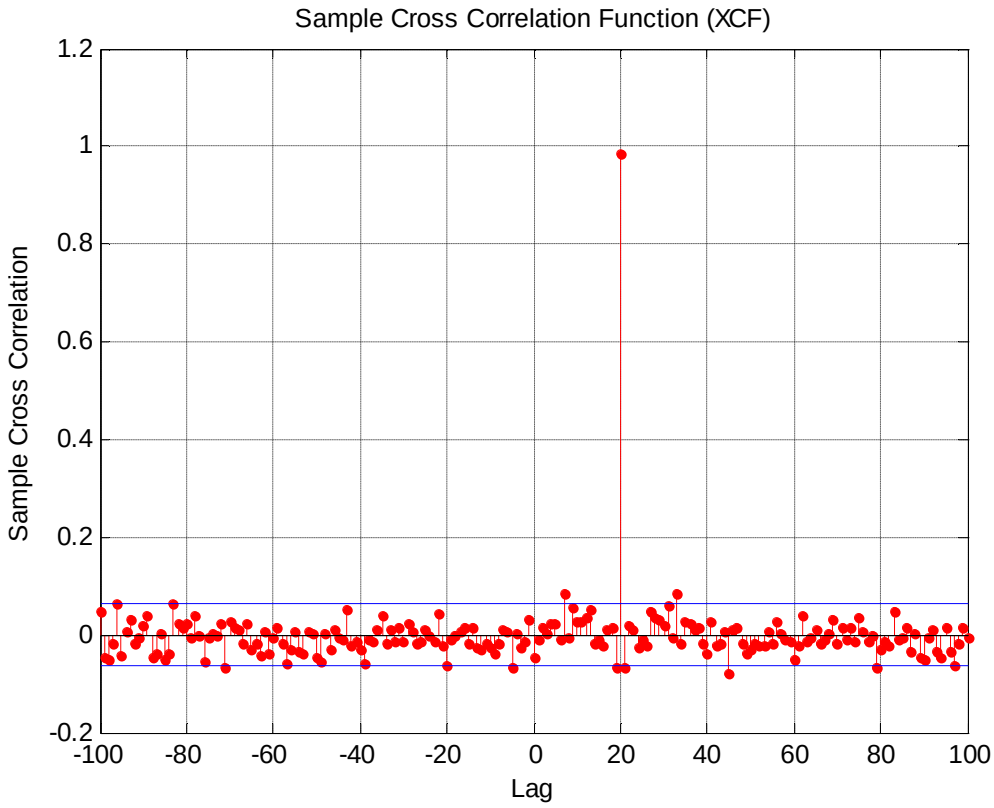
Auto-correlation

```
>> e = randn(1000,1);
>> [ACF,lags,Bounds]= autocorr(e,100);  % computes acf at given lags , and also the bounds
>> autocorr(e,100)    % plot of the acf
```



Cross-correlation

```
>> x = randn(1000,1);  %  random series one
>> y = randn(20,1); % random series 2
>> z = [y;x];  % creating a time lag of 20 for series 1 using series 2
>> crosscorr(x,z,100) % cross-correlation of x and z should be seen at lag 20
```


Sample Cross Correlation Function (XCF)
Sample Cross Correlation
Lag
1.2
1
0.8
0.6
0.4
0.2
0
-0.2
-100
-80
-60
-40
-20
0
20
40
60
80
100