Subject: Re: Covariance Matrix
Posted by andrei.makeev on Mon, 28 Sep 2015 18:26:13 GMT
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Amin,

from your code excerpt, it looks like the way you define the mean (expected value) of the random vector for computing covariance is incorrect.
It is not the mean of vector's elements, but each element of the vector is the mean of the random variable. I.e. for each entry in the vector, you'd have to provide the corresponding sample mean, like for element a1 it'd <a1>, for element a2, <a2>, etc. Vector A itself, is not sufficient for calculating its covariance, you need to have a corresponding vector of means for each element of it.

Andrei.

On Saturday, December 7, 2013 at 7:11:41 AM UTC-5, Amin Farhang wrote:
> Dear All,
>
> I have N observed data as a vector, and I need to compute its NxN covariance matrix, but IDL correlate function just return one value as the correlation (or covariance) between two vectors and do not return a matrix.
> So how can I compute NxN covariance matrix of below vector (for example):
>
> IDL> A = [1,2,3,4,5]
>
>
> Thanks in advance,