Subject: Re: Covariance Matrix
Posted by Matthew Argall on Sat, 07 Dec 2013 17:46:14 GMT
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and, by the way, If you are using a single vector, the covariance will never give you a matrix. The covariance is essientially finding the best fit line between a vector and a lagged version of itself. It does that for however many elements are in the "lag" parameter.

If you are looking for a matrix, then take this example. Say you have a vector measuring the period of three different pendulums. If the data is stored in a 3xN array, then you can call the Correlate function. It will output a 3x3 matrix giving the covariance of the three different pendulums.

Calling Correlate() with two vectors is essentially creating a best-fit line between the two vectors and outputting the correlation coefficient. You need to vary the "lag" to get a matrix.