1 linalg.dot

:

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For 2-D arrays it is equivalent to matrix multiplication, and for 1-D arrays to inner product of vectors (without complex conjugation). For N dimensions it is a sum product over the last axis of a and the second-to-last of b:

dot(a, b)[i,j,k,m] = sum(a[i,j,:] * b[k,:,m]) takes: two arrays a,b

documentation for linalg.multidot: Compute the dot product of two or more arrays in a single function call, while automatically selecting the fastest evaluation order.

multi_dot chains numpy.dot and uses optimal parenthesization of the matrices [R44] [R45]. Depending on the shapes of the matrices, this can speed up the multiplication a lot.

If the first argument is 1-D it is treated as a row vector. If the last argument is 1-D it is treated as a column vector. The other arguments must be 2-D.

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