Example of cross product of a 3D Vector



![A picture containing application

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Use of dot and cross product in

Machine learning.

Dot product

**Used in regression which** **helps in finding the correlation between variables and enables us to predict the continuous output variable based on the one or more predictor variables**.

Cross product transformation

Used in binary feature in deep learning

and in general

1) calculate the angle ( ) between two vectors, 2) **determine a vector normal to a plane**, 3) calculate the moment of a force which is **a measure of the tendency for rotation** about a point, and 4) calculate the moment of a force about a line