

Game Physics Notes 01

CSCI 321

WWU

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References

- Text and pictures
 - <http://tutorial.math.lamar.edu/Classes/CalcII/DotProduct.aspx>
 - <http://chortle.ccsu.edu/vectorlessons/vectorindex.html>
 - <https://www.mathsisfun.com/algebra/vectors.html>
- Videos
 - <https://unity3d.com/learn/tutorials/topics/scripting/vector-maths>

numpy

A nice python library for dealing with mathematical vectors and matrices.

```
>>> import numpy
>>> x = (1,2,3)
>>> y = (3,2,1)
>>> 3*x
(1, 2, 3, 1, 2, 3, 1, 2, 3)
>>> x + y
(1, 2, 3, 3, 2, 1)
>>> xvec = numpy.array(x)
>>> yvec = numpy.array(y)
>>> 3*xvec
array([3, 6, 9])
>>> xvec + yvec
array([4, 4, 4])
>>> numpy.dot(xvec, yvec)
10
```