

$$y = \frac{\Delta x}{\Delta z}$$

$$(x-y)^2$$

$$\phi = \sqrt{\frac{\sum (x-m)^2}{n-1}}$$

$$\int (x \pm a)^2$$

$$Q'' S = \begin{bmatrix} 1 & 0 & 0 \\ 1 & 0 & 1 \\ 0 & 0 & 1 \end{bmatrix} \pi \approx 3.14$$

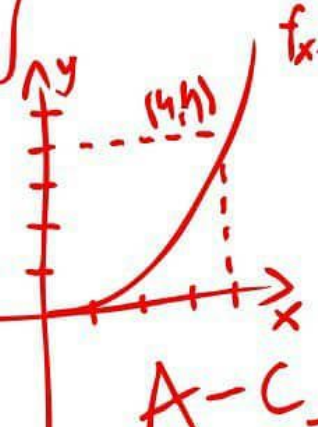
$$\lim_{x \rightarrow 1} \frac{\operatorname{ctg} x - 2}{2^{11} x^3}$$

$$P = r^2 \pi$$

$$\ln = \sqrt{a \times b}$$

$$4x = 8 - 3y^2 \quad e = 2.79$$

$$B \sum = n-1$$

$$A - C =$$


Why Linear algebra for Machine learning??

$$x^2 + y^2 = z$$

$$\frac{\Delta x}{\Delta y} = \lim_{\Delta y \rightarrow 1} \frac{\Delta x + 2}{\Delta y - 1}$$

$$(x+a)$$

$$\sin x$$

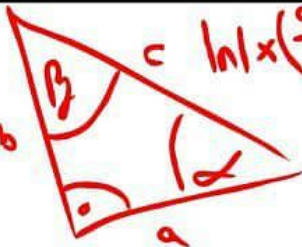
$$e = \cos x + \operatorname{tg} y$$

$$\int = \frac{\sqrt{x+a^2}}{x}$$

$$X_{1/2} = \frac{b \pm (a-c)}{\sqrt{a}}$$

$$S = \int_{t=2}^{10} 5t \, dt \quad y = \frac{\Delta x}{\Delta z}$$

$$\sin a = \frac{b^3}{(x+h)}$$

$$x + b^2 = c$$


swipe <<<



- Lot of ML concepts are tied up with linear algebra.
- To understand notation in books.
- Helps you to read and interpret statistical concepts.
- Helps to understand PCA
- It Helps Build Better ML Algorithms From Scratch
- For Processing Graphics In ML
- Helps to understand Matrix factorization
- ML completely uses matrix operations.

Resources <<<



- **Essence Of Linear Algebra By 3Blue1Brown**
- **Linear Algebra By Khan Academy**
- **Computational Linear Algebra for Coders By fast.ai**
- **MIT linear algebra**



- **Introduction to Linear Algebra by Gilbert Strang,**
- **Numerical Linear Algebra by Lloyd Trefethen.**
- **Linear Algebra and Its Applications by Gilbert Strang.**
- **Matrix Computations by Gene Golub and Charles Van Loan**
- **Deep Learning (book) deeplearningbook.org**



- **Linear Algebra on Khan Academy**
- **Linear Algebra: Foundations to Frontiers on edX**
- **Andrew Ng's Machine Learning course on Coursera**

Thank You.

Like, Comment, Share and Save it for Later

Happy Learning

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