

15 July 2020

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## Machine learning - linear algebra.

Report:

Matrices in linear algebra : Objects that operate on vectors.

- Linear algebra is linear, because it just takes input values, our  $a$  and  $b$  and multiplies them by constants. So everything is linear.
- and algebra, it's notation describing mathematical objects & system of manipulating these notations
- A column matrix just read us what it does to the unit vector along each axis.
- A matrix is composition of transformations.
- It's not commutative. So this is interesting. There seem to be some deep connection between simultaneous equations, these are called matrices.

 $A_1(A, v)$ 

$$A_1 = \begin{bmatrix} 0 & 1 \\ -1 & 0 \end{bmatrix}$$

