## 1 | Why columns (not rows)?

- 1.1 | Because columns map to input, while rows map to output
- 1.2 | Linear dependence is going to have more to do with the columns
- 1.3 | Dot products are "linear combinations" of the columns
- 1.4 | It's only because we usually multiply with variables on the right. When we go backwards, then we care about the row.

## 2 | #definiton column space

definition

The subpsace that gets hit by inputs.

- 3 | Row vs Column linear dependency
- 3.1 | Under what circumstances is it true that row linear independence iff column linear independence?
- 3.1.1 | maybe in square matrices?

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