Fundamental Subspaces

Row A

The space spanned by the rows of matrix.

Properties

- The basis for Row A is given by the pivot rows of A.
- $\dim (\operatorname{Row} A) = \dim (\operatorname{Col} A)$
- $Row A = Col A^T$

$\mathrm{Col}A$

Look Column Space and Null Space to learn more.

NullA

Look Column Space and Null Space to learn more.

Properties

- $\bullet \ \ (\mathrm{Row} A)^{\perp} = \mathrm{Null} A$
- $\bullet \ \ (\mathrm{Null} A)^\perp = \mathrm{Row} A$

$NullA^T$

Properties

- ullet $(\mathrm{Col}A)^{\perp} = \mathrm{Null}A^T$
- ullet $(\mathrm{Null}A^T)^\perp = \mathrm{Col}A$