Image transformations

Mitaxi Mehta: Lecture 11

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- If the input vectors are,

$$\begin{pmatrix} 0 \\ 0 \end{pmatrix} \begin{pmatrix} 1 \\ 0 \end{pmatrix} \begin{pmatrix} 1 \\ 1 \end{pmatrix} \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$

The program makes a square.

- Use the matrix,

$$A = \begin{pmatrix} 2 & 0 \\ 0 & 1/2 \end{pmatrix}$$

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- What will be the new figure with $p'_j \uparrow$ as inputs?

- What kind of transformation is generated by,

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- Mayank: Rotation.

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- A simple test is rotate a vector (say, (1,0)) with a specific value of θ ($\pi/2$).
- Using the matrix for rotation and $\theta = \pi/2$ rotate the square defined before.