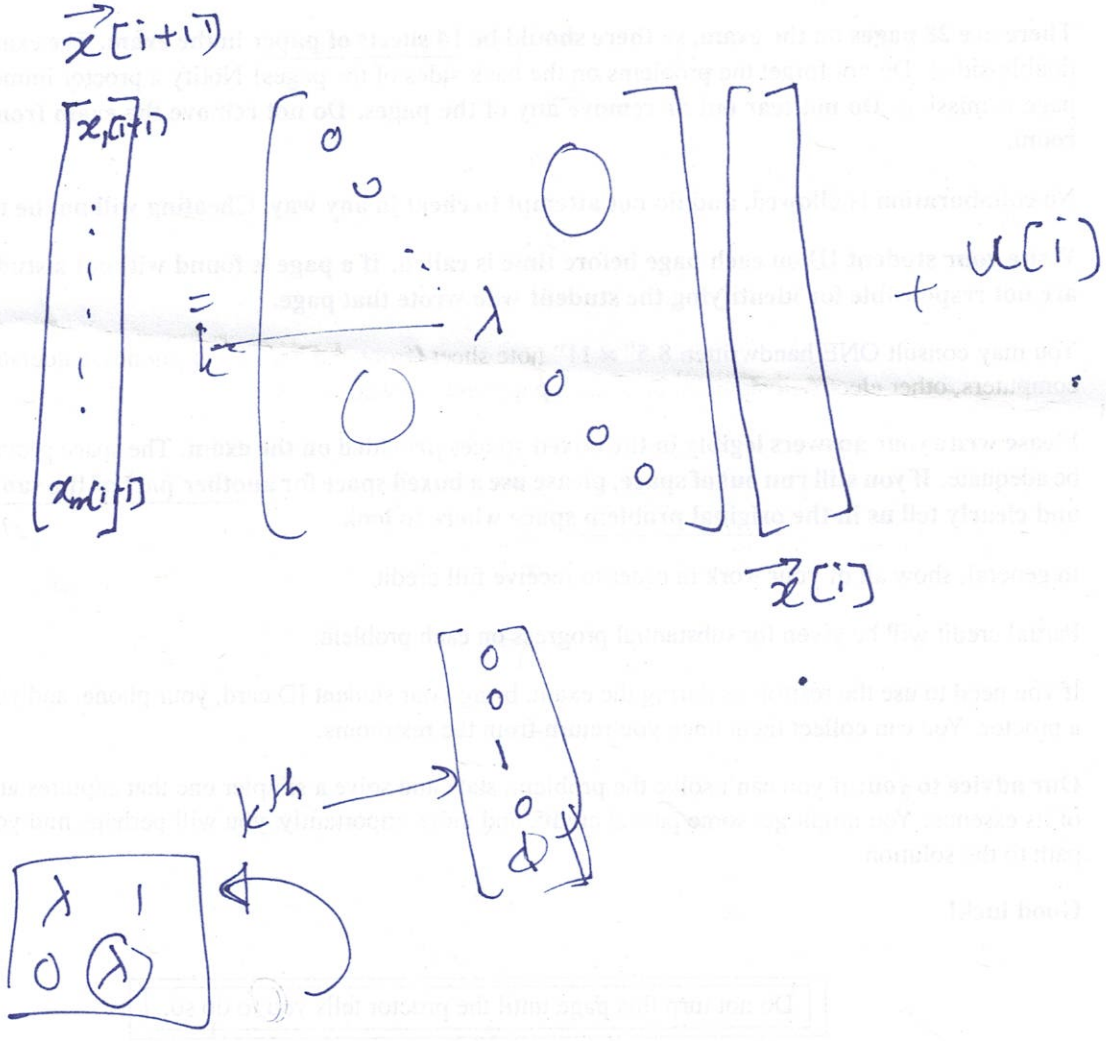
PRINT your student ID: _____

Doodle page!

Draw us something if you want or give us suggestions, compliments, or complaints.
You can also use this page to report anything suspicious that you might have noticed.



$\vec{x}[k+1] = A\vec{x}[k]$

$\lambda_{us} >> \sigma_{us}$

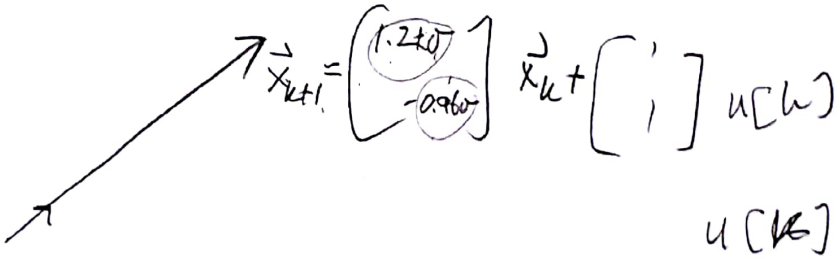
$A = \begin{bmatrix} \lambda_1 & \\ & \lambda_2 \end{bmatrix}$

$\lambda_1 \sim \text{normal}(\lambda_{us}, \sigma_{us})$

$\lambda_2 \sim \text{normal}(\lambda_s, \sigma_s)$ ← stable 0.96

Edits

1. fixed A
2. Much larger system (some λ_i unstable, most λ_i stable)
3. Randomize subspace observation
4. Scalar input



$u[k] = f^T \vec{x}[k]$

$u[k] = [f_1\ f_2]\vec{x}_k$

$$\vec{x}_{n+1} = \begin{bmatrix} \lambda_1 & 0 \\ 0 & \lambda_2 \end{bmatrix} \vec{x}_n + \begin{bmatrix} 1 \\ 1 \end{bmatrix} u_n$$

$$\begin{bmatrix} \lambda_1 + f_1 & f_2 \\ f_1 & \lambda_2 + f_2 \end{bmatrix}$$

$\vec{x}_{n+1} =$

$\vec{u}_n = \begin{bmatrix} u_{1n} \\ u_{2n} \end{bmatrix}$

$\vec{u}_n = [F]\vec{x}_n$

$$\begin{bmatrix} f_1 & 0 \\ 0 & f_2 \end{bmatrix} \vec{x}_n$$