## EECS 16B CSM

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2020-11-22

## Linear Time Invariant Systems

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- $\blacksquare$  Linearity:  $F\{ax_1[t]+bx_2[t]\}=aF\{x_1[t]\}+bF\{x_2[t]\}$
- Time Invariance:  $y[t t_0] = F\{x[t t_0]\}$
- Causality:  $y[t] = F\{x[t], x[t-t_0]\}$

## Moore-Penrose Pseudoinverse

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- application of SVD
- finds inverses of non-invertible matrices