Written by pornrat Thursday, 26 May 2016 15:06 -

{youtube}pMGygUPW_fE{/youtube}

Introduction to applied linear algebra and linear dynamical systems, with applications to circuits, signal processing, communications, and control systems. Topics include: Least-squares aproximations of over-determined equations and least-norm solutions of underdetermined equations. Symmetric matrices, matrix norm and singular value decomposition. Eigenvalues, left and right eigenvectors, and dynamical interpretation. Matrix exponential, stability, and asymptotic behavior. Multi-input multi-output systems, impulse and step matrices; convolution.

Lecture 2 Introduction to Linear Dynamical Systems