

Linear algebra for data science, machine learning, and signal processing

Jeffrey A. Fessler, Raj Rao Nadakuditi

© 2024 - 9781009418140

Contents

[1 - Getting Started](#) pp 1-11

[2 - Introduction to Matrices](#) pp 12-62

[3 - Matrix Factorization: Eigendecomposition and SVD](#) pp 63-95

[4 - Subspaces, Rank, and Nearest-Subspace Classification](#) pp 96-142

[5 - Linear Least-Squares Regression and Binary Classification](#) pp 143-196

[6 - Norms and Procrustes Problems](#) pp 197-237

[7 - Low-Rank Approximation and Multidimensional Scaling](#) pp 238-282

[8 - Special Matrices, Markov Chains, and PageRank](#) pp 283-334

[9 - Optimization Basics and Logistic Regression](#) pp 335-364

[10 - Matrix Completion and Recommender Systems](#) pp 365-380

[11 - Neural Network Models](#) pp 381-389

[12 - Random Matrix Theory, Signal + Noise Matrices, and Phase Transitions](#) pp 390-404

[References](#) pp 405-422

[Index](#)