## Outline for EE 127, S'14

1 21-Jan Introduction 23-Jan Linear algebra 2 Vectors and matrices, linear equations BVD, SVD, linear equations 23-Jan Linear algebra 2 Vectors and matrices, linear equations BVD, SVD, linear equations 3 Symmetric eigenvalues 30-Jan 4-Feb 5 Principal component analysis 6-Feb 5 Principal component analysis 6 Applications of SVD 4 HW2: applications of LP, LS HW1 4 I1-Feb Linear-Quadratic programming 7 Least-squares 8 Linear programming 9 Quadratic programming 13-Feb 9 Quadratic programming 9 Quadratic programming 10 LP & QP: examples HW3: conic programs, robust HW2 10-Feb 11 Geometric programming (GP) 11-Feb Conic programming 12 Second-order cone optimization 13 Robust linear programming (SDP) 13-Mar 14 Semidefinite programming (SDP) 13-Mar 15 Review 13-Mar 16 Midterm 15 Review 11-Mar 16 Midterm 16 Midterm 17 Convex functions 18 Convex sets 11 1-Apr 19 Convex problems 19 Convex problems 19 Convex problems 19 Convex problems 10-Apr 20 Lagrange duality 17 Convex functions 11 1-Apr 19 Convex problems 19 Convex probl	Week	Date	Topic	Lecture topic	Homework given	HW due Notes
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