Thur 08/28 Course Introduction Thur 08/28 Course Introduction Lab 0 (due F 09/05 at 2pm) Tues 09/02 Objective functions and constraints. Linear programs (LP). Thur 09/04 Example 1: Transportation problem Thur 09/04 Thur 09/04 Example 2: Shortest path problem Thur 09/01 Graphical solutions to LPs Thur 09/11 Thur 09/11 Lab 1 (due F 09/19 at 2pm) Tues 09/06 Feasibility, Boundedness, Uniqueness. Simplex Algorithm. Thur 09/18 Quadratic programming (QP) motivation: Least Squares Thur 09/18 Lab 1 (due F 09/19 at 2pm) Tues 09/23 Graphical QP. Optimality Conditions. Thur 09/15 Sequential Quadratic Programming (SQP). Thur 09/15 Lab 2 (due F 10/03 at 2pm) Tues 09/30 Integer programming (IP): Fractional solutions. LP Rounding. Shortest path revisited. Thur 10/02 Example of IP: shortest path via Dijkstra's algorithm Thur 10/02 Example Algorithm Example: Air Traffic Control Thur 10/03 MiRet Integer Programming (NLP). Convex/concave functions & sets Thur 10/04 Thuse 10/07 Branch & Bound Thur 10/16 INCLASS MIDTERM EXAM Thur 10/14 IMP Example: Air Traffic Control Thur 10/16 INCLASS MIDTERM EXAM Thur 10/16 INCLASS MIDTERM EXAM Integer 10/24 at 2pm) Tues 10/21 Nonlinear Programming (NLP). Convex/concave functions & sets<
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Thur 11/13 Dynamic Programming (DP). Principle of Optimality. Shortest-path revisited.
Tues 11/18DP Example 1: Knapsack ProblemThur 11/20DP Example 2: Smart Home Appliance SchedulingThur 11/20Lab 5 (due F 11/21 at 2pm)
Tues 11/25Stochastic Dynamic Programming (SDP)Thur 11/27THANKSGIVING HOLIDAYThur 11/27THANKSGIVING HOLIDAY
Tues 12/02Guest Lecture #2Thur 12/04Final ReviewThur 12/04Final Review