

Optimization Algorithms and Applications

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Abstract

The Systems Optimization Laboratory was formed by George Dantzig and Richard Cottle nearly 25 years ago, to foster research on algorithms for constrained optimization (linear and nonlinear programming). Keywords are computational methods, large-scale systems, and more recently, optimization under uncertainty. We review the main solvers (MINOS, NPSOL, and SNOPT) and some interesting applications that have arisen through their use within larger systems (GAMS, OTIS and DECIS). Excerpts from "Life in NZ" will illustrate some important optimization concepts.
