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NONLINEAR PROGRAMMING

Edited by

Richard W. Cottle and Carlton E. Lemke

Harold W. Kuhn, *Nonlinear programming: A historical view*

Garth P. McCormick, *Optimality criteria in nonlinear programming*

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M. J. D. Powell, *Some global convergence properties of a variable metric algorithm for minimization without exact line searches*

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R. Tyrrell Rockafellar, *Lagrange multipliers in optimization*

O. L. Mangasarian, *Unconstrained methods in nonlinear programming*

J. E. Dennis, Jr., *A brief survey of convergence results for quasi-Newton methods*

These Proceedings are based on lectures delivered at the symposium on Nonlinear Programming held March 23 and 24, 1975, as part of the American Mathematical Society's annual New York meeting. This event was the ninth in a series of Symposia in Applied Mathematics jointly sponsored by the Society for Industrial and Applied Mathematics and the American Mathematical Society with financial support from the Energy Research and Development Agency (formerly the Atomic Energy Commission) and the National Science Foundation.

The organizing committee for the symposium consisted of R. W. Cottle (chairman), C. E. Lemke, S. M. Robinson, and J. B. Rosen. The committee's intent was to help bring to the attention of a larger mathematical audience some of the history, theory, applications and vigorous research activity of the Nonlinear Programming field. The editors feel that the results included in these Proceedings can be recommended as well to the worker in the field as to the interested initiate.

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