Record Nr.	UNINA9910806167603321
Titolo	Nonlinear programming 4 : proceedings of the Nonlinear Programming Symposium 4 / / conducted by the Computer Sciences Department at the University of WisconsinMadison, July 14-16, 1980 ; edited by Olvi L. Mangasarian, Robert R. Meyer, Stephen M. Robinson
Pubbl/distr/stampa	New York, New York ; ; London, [England] : , : Academic Press, , 1981 ©1981
ISBN	1-4832-6017-8
Descrizione fisica	1 online resource (560 p.)
Disciplina	519.7/6
Soggetti	Nonlinear programming
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index at the end of each chapters.
Nota di contenuto	Front Cover; Nonlinear Programming 4; Copyright Page; Table of Contents; CONTRIBUTORS; PREFACE; CHAPTER 1. AN UPPER TRIANGULAR MATRIX METHOD FORQUADRATIC PROGRAMMING; ABSTRACT; 1. INTRODUCTION; 2. A COMPARISON OF THREE ACTIVE SET METHODS; 3. THE CALCULATION OF d AND; 4. THE REVISION OF U AND L; 5. DISCUSSION; ACKNOWLEDGMENTS; REFERENCES; CHAPTER 2. SOLVING QUADRATIC PROGRAMSBY AN EXACT PENALTY FUNCTION; ABSTRACT; 1. INTRODUCTION; 2. THE METHOD; 3. BASIC PROPERTIES; 4. FINITE CONVERGENCE; 5. COMPUTATIONAL RESULTS; ACKNOWLEDGMENT; REFERENCES CHAPTER 3. QP-BASEDMETHODS FOR LARGE-SCALE NONLINEARLY CONSTRAINED OPTIMIZATIONABSTRACT; 1. INTRODUCTION; 2. LARGE- SCALE LINEARLY CONSTRAINED OPTIMIZATION; 3. QP-BASED METHODS FOR DENSE PROBLEMS; 4. THE USE OF A LINEARLY CONSTRAINED SUBPROBLEM; 5. EXTENSION OF QP-BASED METHODS TO THE LARGE- SCALE CASE; 6. REPRESENTING THE BASIS INVERSE; 7. THE SEARCH DIRECTION FOR THE SUPERBASIC VARIABLES; 8. AN INEQUALITY QPAPPROACH; 9. CONCLUSIONS; REFERENCES; CHAPTER 4. NUMERICAL EXPERIMENTS WITH AN EXACT L1PENALTY FUNCTION METHOD; ABSTRACT; 1. INTRODUCTION; 2. A GLOBALLY CONVERGENT

1.

ALGORITHM

Sommario/riassunto	Nonlinear Programming 4
Sommario/riassunto	DERIVATION OF SYMMETRICPOSITIVE DEFINITE SECANT UPDATES; ABSTRACT; 1. INTRODUCTION AND BACKGROUND; 2. THE BFGS AND DFP FROM THE GOOD AND BAD BROYDEN METHODS 3. HEREDITARY POSITIVE DEFINITENESS AND IREN SIZING FORSYMMETRIC RANK-TWO UPDATES4. A PROJECTED BFGS FROM THE PROJECTED BROYDEN UPDATE; 5. UPDATING CHOLESKY FACTORS; REFERENCES; APPENDIX: THE SCALED BFGS DERIVATION; CHAPTER8. ON PRECONDITIONED CONJUGATE GRADIENT METHODS; ABSTRACT; I. INTRODUCTION; II. USING MODERATE ADDITIONAL STORAGE; III. UTILIZING SPARSE SECOND ORDER INFORMATION; REFERENCES; CHAPTER 9. FINDING THE GLOBAL MINIMUM OF A FUNCTION OF ONE VARIABLE USING THE METHOD OF CONSTANTSIGNED HIGHER ORDER DERIVATIVES; ABSTRACT; 1. INTRODUCTION; 2. PRELIMINARY THEOREMS AND LEMMAS 3. ALGORITHMIC CONSIDERATIONS4. APPLICATION TO POLYNOMIAL MINIMIZATION; 5. EFFECTS OF CALCULATION ERRORS; 6. COMMENT; REFERENCES; CHAPTER 10. ON A BUNDLE ALGORITHMFOR NONSMOOTH OPTIMIZATION; ABSTRACT; 1. INTRODUCTION; 2. THE ALGORITHM WITHOUT CONSTRAINTS; 3. LINEARLY CONSTRAINED PROBLEMS; APPENDIX; REFERENCES; CHAPTER 11. CONVERGENCE RESULTS IN A CLASS OFVARIABLE METRIC SUBGRADIENT METHODS1; ABSTRACT; 1. INTRODUCTION; 2. EXAMPLES; 3. A CLASS OF VARIABLE METRIC SUBGRADIENT OPTIMIZATIONMETHODS; 4. VARIOUS METHODS; 5. BEHAVIOUR ON SYSTEMS OF LINEAR EQUALITIES AND ONQUADRATICS; 6. EXPERIMENTS 7. CONCLUSION
	3. AN ACTIVE SET METHOD4. NUMERICAL EXPERIMENTS AND DISCUSSION; ACKNOWLEDGMENTS; REFERENCES; CHAPTER 5. AN ITERATIVE LINEAR PROGRAMMING ALGORITHMBASED ON AN AUGMENTED LAGRANGIAN; ABSTRACT; REFERENCES; CHAPTER 6. ITERATIVE ALGORITHMSFOR SINGULAR MINIMIZATION PROBLEMS; ABSTRACT; 1. INTRODUCTION; 2. THE QUADRATIC CASE; 3. NONQUADRATIC CASE; 4. MINIMIZATION IN THE PRESENCE OF ERRORS; CONCLUSIONS; ACKNOWLEDGMENTS; REFERENCES; CHAPTER 7. A NEW