Record Nr. UNINA9910360851603321 Autore Eiselt Horst A. <1950-> Titolo Nonlinear Optimization: Methods and Applications / / by H. A. Eiselt, Carl-Louis Sandblom Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2019 **ISBN** 9783030194628 3030194620 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (XII, 366 p. 99 illus., 20 illus. in color.) Collana International Series in Operations Research & Management Science, . 2214-7934;;282 519.76 Disciplina Soggetti Mathematical optimization Operations research Industrial management Management science Continuous Optimization Operations Research and Decision Theory Industrial Management Operations Research, Management Science Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Introduction -- Unconstrained Optimization -- Applications of Nonlinear Programming -- Optimality Conditions and Duality Theory --General Solution Methods for Constrained Optimization -- Methods for Linearly Constrained Problems -- Methods for Nonlinearly Constrained Problems -- Geometric Programming. Sommario/riassunto This book provides a comprehensive introduction to nonlinear programming, featuring a broad range of applications and solution methods in the field of continuous optimization. It begins with a

> summary of classical results on unconstrained optimization, followed by a wealth of applications from a diverse mix of fields, e.g. location analysis, traffic planning, and water quality management, to name but a

few. In turn, the book presents a formal description of optimality conditions, followed by an in-depth discussion of the main solution

techniques. Each method is formally described, and then fully solved using a numerical example.