Introduction to derivative-free optimization

Conn, Andrew R., author

Abstrak

This book is the first contemporary comprehensive treatment of optimization without derivatives, and it covers most of the relevant classes of algorithms from direct-search to model-based approaches. Readily accessible to readers with a modest background in computational mathematics, Introduction to Derivative-Free Optimization contains:

1. a comprehensive description of the sampling and modeling tools needed for derivative-free optimization that allow the reader to better understand the convergent properties of the algorithms and identify their differences and similarities;

2.analysis of convergence for modified Nelderead and implicit-filtering methods as well as for model-based methods such as wedge methods and methods based on minimumorm Frobenius models.