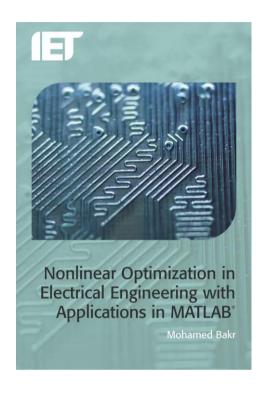![IET The Institution of Engineering and Technology]

NONLINEAR OPTIMIZATION IN ELECTRICAL ENGINEERING WITH APPLICATIONS IN MATLAB®

MOHAMED BAKR

This book provides an introductory course on nonlinear optimization in electrical engineering, with a focus on applications including the design of electric, microwave and photonic circuits, wireless communications and digital filter design.

- Basic concepts are introduced using a step-by-step approach
- Features a variety of practical electrical engineering-related examples
- Illustrated with MATLAB® codes that the reader can use and adapt.
- Topics covered include; classical optimization methods, one dimensional optimization, unconstrained optimization, constrained optimization, global optimization, space mapping optimization and adjoint variable methods.

READERSHIP

Essential reading for advanced students in electrical engineering and will also interest electrical engineering professionals.

AUTHOR INFORMATION

Mohamed Bakr is an Associate Professor at the Department of Electrical and Computer Engineering, McMaster University, Canada, where his research interests include optimization methods, computer-aided design and modelling of microwave circuits, neural networks applications, smart analysis of microwave circuits and efficient optimization using time domain simulation methods.

www.theiet.org/books-nonlinear

To place an order or to request further information, contact Alex Fox, IET Books Sales Manager

T: 01438 767655
E: AFox@theiet.org