**LGO: An Integrated Model Development and Solver System for Global and Nonlinear Optimization**

Pintér Consulting Services Inc., Halifax, NS, Canada

**Global Optimization** (GO) is aimed at finding the absolutely best solution in complex nonlinear models. Applying advanced GO tools often leads to much improved decisions, when compared to local solutions found by traditional numerical methods. (The picture above shows a global optimization model in just two variables, and it clearly illustrates the potential difficulty of such problems.)

The **LGO** software product is based on award-winning research. **LGO** is used worldwide by industry, consultants, research institutions, and universities.

**Main LGO Features**

- problems are solved under the most general structural assumptions, specifically including 'black box' (very complex or confidential) models
- integrated suite of advanced global and local solver options
- automatic and interactive operational modes
- User's Guide; model development samples; technical support
- Microsoft Windows compatible version — fully integrated development environment for model formulation, solution and analysis
• 'Silent' implementations— callable from user applications
• Customized implementations, and native code development for other platforms are also available

**LGO Development**

The **LGO** algorithm and software development work is based on research done by János D. Pintér. Dr. Pintér is a well-recognized author and software developer in the area of global optimization. His related work includes

'Global Optimization in Action'
and
'Computational Global Optimization in Nonlinear Systems'
Lionheart Publishing, Atlanta, GA 30339 USA, a 59-page short tutorial book and software demonstrations (this work is available also electronically) (http://www.lionhrtpub.com/books/globaloptimization.html)

as well as other edited books and over 130 thirty research publications.

Dr. Pintér serves on the Editorial Board of the **Journal of Global Optimization** since its 1991 foundation, and received the **2000 INFORMS Computing Society Prize for Research Excellence**.

**Contact Information**

Demonstration program copies and further information is available upon request. Please contact

**Pintér Consulting Services, Inc.**
129 Glenforest Drive, Halifax, Nova Scotia, Canada B3M 1J2
Phone/Fax: 1-(902)-443-5910
E-mail: jdpinter@hfx.eastlink.ca
WWW Homepage: http://is.dal.ca/~jdpinter/
Visual Model Analysis Using LGO
Complete Catalogue

The Year 2000 recipient of the INFORMS Computing Society Prize for Research Excellence in the Interface Between Operations Research and Computer Science

Global Optimization in Action
Continuous and Lipschitz Optimization: Algorithms, Implementations and Applications

by
János D. Pintér
Pintér Consulting Services, Dalhousie University, Halifax, Canada

NONCONVEX OPTIMIZATION AND ITS APPLICATIONS
Volume 6

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Web page for 'Global Optimization in Action'

LIONHEART PUBLISHING

Computational Global Optimization in Nonlinear Systems
An Interactive Tutorial

By
János D. Pintér, Ph.D., D.Sc.

Pages: 61
PDF Price: $15.00
Print Price: $19.00
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ORDER INFORMATION

"Computational Global Optimization in Nonlinear Systems," by János Pintér, presents a concise, practical introduction to models and algorithms that enable the analysis and solution of nonlinear decision problems in the presence of multiple optima. Such problems arise in many

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Web page for 'Computational Global Optimization in Nonlinear Systems'