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Aims and Scope

Optimization has been expanding in all directions at an astonishing rate during the last few decades. New algorithmic and theoretical techniques have been developed, the diffusion into other disciplines has proceeded at a rapid pace, and our knowledge of all aspects of the field has grown even more profound. At the same time, one of the most striking trends in optimization is the constantly increasing emphasis on the interdisciplinary nature of the field. Optimization has been a basic tool in all areas of applied mathematics, engineering, medicine, economics, and other sciences.

The series *Springer Optimization and Its Applications* publishes undergraduate and graduate textbooks, monographs and state-of-the-art expository work that focus on algorithms for solving optimization problems and also study applications involving such problems. Some of the topics covered include nonlinear optimization (convex and nonconvex), network flow problems, stochastic optimization, optimal control, discrete optimization, multi-objective programming, description of software packages, approximation techniques and heuristic approaches.

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Stamatina Th. Rassia • Panos M. Pardalos
Editors

Future City Architecture for Optimal Living

 Springer

Editors

Stamatina Th. Rassia
Singapore-ETH Centre for Global
Environmental Sustainability
Future Cities Laboratory
Singapore

Panos M. Pardalos
Center for Applied Optimization
Department of Industrial
and Systems Engineering
University of Florida
Gainesville, FL, USA

Laboratory of Algorithms and Technologies
for Networks Analysis (LATNA)
National Research University
Higher School of Economics
Moscow, Russia

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Preface

Future City Architecture for Optimal Living presents a unique interdisciplinary combination of architecture, engineering, physics, and related fields in strategic planning, thinking, and designing future cities as livable urbanized environments.

Cities in the words of Geoffrey West are “the crucible of civilization.” In our belief, cities and their development can provide an impact on future ways of living as they can transform our lifestyles through a wide network of attributes. By combining together a variety of disciplines, this book presents new ideas and research practices on a variety of topics related to architecture and interdisciplinary mathematical thinking, network design, smart city development, as well as related theories for the future.

The chapters composing this book are written by eminent researchers and practitioners who offer expert opinions and hands-on international approaches to shaping future cities. Together, experts from the United Kingdom, Portugal, France, Italy, Switzerland, Netherlands, Greece, USA, Canada, Singapore, and Hong Kong present their work, experience, and new ideas. New questions are presented, such as whether cities can really be livable and how one can build sustainable systems and resilient cities to climate changes. This book offers a forum of novel ideas that are presented in a unified manner.

We would like to express our special thanks to all the authors of the chapters contributed in this book. Last but not least, we wish to acknowledge the superb assistance that the staff of Springer has provided during the preparation of this publication.

Singapore
Gainesville, FL, USA

Stamatina Th. Rassaia
Panos M. Pardalos

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Contributors

Adolf Acquaye Kent Business School, University of Kent, Canterbury, Kent, UK

Kay W. Axhausen ETH Zurich, Institute for Transport Planning and Systems, Zurich, Switzerland

Giuseppe Borruso Department of Geographical and Historical Sciences, University of Trieste, Trieste, Italy

José Nuno Beirão Faculty of Architecture, University of Lisbon, Lisbon, Portugal

Clement Blanchet Clement Blanchet Architecture, Paris, France

Constantinos Cartalis Department of Environmental Physics and Meteorology, National and Kapodistrian University of Athens, Athens, Greece

Ljiljana Čavić Faculty of Architecture, University of Lisbon, Lisbon, Portugal

André Chaszar O-Design Research and Consulting, New York, NY, USA

Department of Architecture, Delft University of Technology, Delft, Netherlands

Fabio Gramazio ETH Zurich, Zurich, Switzerland

Rick Greenough Institute of Energy and Sustainable Development, De Montfort University, Leicester, UK

Limin Hee Centre for Liveable Cities, Singapore, Singapore

Taofeeq Ibn-Mohammed Institute of Energy and Sustainable Development, De Montfort University, Leicester, UK

Matthias Kohler ETH Zurich, Zurich, Switzerland

William S.W. Lim Distinguished Architect, Singapore, Singapore

Forrest Meggers School of Architecture and the Andlinger Center for Energy and the Environment, Princeton University, Princeton, NJ, USA

Beniamino Murgante School of Engineering, University of Basilicata, Potenza, Italy

Robin Nicholson, CBE, RIBA, Hon FStructE, Hon FCIBSE Cullinan Studio, London, UK

Leticia Ozawa-Meida Institute of Energy and Sustainable Development, De Montfort University, Leicester, UK

Mojtaba Samimi RMM Solarch Studio, Montreal, Canada

Matheos Santamouris Physics Department, National and Kapodistrian University of Athens, Athens, Greece

Anita Siu ARUP, Kowloon, Hong Kong

Simon Taylor School of Civil and Building Engineering, Loughborough University, Loughborough, UK

Ricky Tsui Ove Arup & Partners HK Ltd, Kowloon, Hong Kong

Basil J. Vitins ETH Zurich, Institute for Transport Planning and Systems, Zurich, Switzerland

Jan Willmann ETH Zurich, Zurich, Switzerland

Shu-Wei Wu Ove Arup & Partners HK Ltd, Kowloon, Hong Kong