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Nota di contenuto	Preface -- Foreword -- Part I Reviews and perspectives -- 1 The Revolutionary Internet of Things , by Arian Razmi Farooji -- 2 A Computational Modeler's Tour of the Port of Houston, by Niels Aalund, William Fitzgibbon -- 3 Agile deep learning UAVs operating in Smart Spaces: Collective Intelligence vs. "Mission-Impossible", by Michael Cochez, Jacques Periaux, Vagan Terziyan, Tero Tuovinen -- Part II Computational Methods and Models -- 4 A Simple Metaheuristic for the Fleet Size and Mix Problem with Time Windows, by Olli Bräysy, Wout Dullaert, Pasi P. Porkka -- 5 Green Route Allocation in a Transportation Network, by Victor Zakharov, Alexander Krylatov, Dmitriy Volf -- 6 Why to Climb if One Can Jump: A Hill Jumping Algorithm for the Vehicle Routing Problem with Time Windows, by David Mester, Olli Bräysy, Wout

Dullaert -- 7 Clustering Driving Destinations Using a Modified DBSCAN Algorithm with Locally-defined Map-Based Thresholds, by Ghazaleh Panahandeh, Niklas Åkerblom -- 8 Automatic Customization Framework for Efficient Vehicle Routing System Deployment, by Jussi Rasku, Tuukka Puranen, Antoine Kalmbach, Tommi Kärkkäinen4 -- 9 The Multi-period Fleet Size and Mix Vehicle Routing Problem with Stochastic Demands, by Urooj Pasha, Arild Hoff, Lars Magnus Hvattum -- 10 Applying multi-objective robust design optimization procedure to the route planning of a commercial aircraft, by Jordi Pons-Prats, Gabriel Bugeda, Francisco Zarate, Eugenio Oñate, Jacques Periaux -- Part III Translational research -- 11 Reallocation of Logistics Costs in a Cooperative Network of Sawmills, by Patrik Flisberg, Mikael Frisk, Mario Guajardo, Mikael Rönnqvist -- 12 Impact of the Heterogeneity of the Ballast on the Dynamical Behavior of the Ballast-soil, by Lucio De Abreu Correa, Regis Cottreau, Estelle Bongini, Sofia Costa d'Aguiar, Baldrik Faure and Charles Voivret -- 13 Numerical and Parametric Study of MVGs on a UAV Geometry in Subsonic Flow, by Miguel Chavez, Oliver. M. F. Browne, Eusebio Valero -- 14 Investigating Side-wind Stability of High Speed Trains using High Resolution Large Eddy Simulations and Hybrid Models, by Moritz M. Fragner, Ralf Deiterding -- 15 Russian Mechanism to Support Renewable Energy Investments: Before and After Analysis, by Mariia Kozlova, Mikael Collan, Pasi Luukka.

Sommario/riassunto

This volume addresses challenges and solutions in transport and mobility of people and goods with respect to environment, safety, security and socio-economics issues, exploring advanced computational research work and the latest innovations in transport. This book brings together lectures presented at the ECCOMAS Thematic CM3 Conference on Transport held in Jyväskylä, Finland, 25-27 May 2015. It is divided into three parts, I: Reviews and Perspective, II: Computational Methods and Models and III: Translational Research. Each of these parts consists of contributions that present solutions to many transport challenges in this complex, rapidly changing subject. The work contains the latest achievements of European research and technological developments needed for the next decade through computational results of scientific and technical experts who have made essential contributions in transport efficiency in Europe. The material presented here is the state of the art in Transport Modeling, Simulation and Optimization in the fields of Aeronautics, Automotive, Logistics, Maritime and Rails. Furthermore, this volume also answers the question how to apply Computational Research in Transport in order to provide innovative solutions to Green Transportation challenges of identified in the ambitious Horizon 2020 program. This book is intended for students, researchers, engineers and practitioners that are computationally involved in the deployment of Intelligent Transport Systems (ITS) in the areas of optimal use of road, traffic and travel data, traffic and freight management ITS services, road safety and security, sea traffic management, etc.
