# International Journal of E-Planning Research

January-March 2013, Vol. 2, No. 1

# **Table of Contents**

### EDITORIAL PREFACE

i Landscape Virtual Modeling, Visual Simulation and Collaborative Knowledge Management for Urban and Regional Sustainability

Carlos Nunes Silva, Institute of Geography and Spatial Planning, University of Lisbon, Lisbon, Portugal

## RESEARCH ARTICLES

1 Coupling Real-Time 3D Landscape Models with Microclimate Simulations

Lewis Gill, Department of Computer Science, University of Sheffield, Sheffield, UK
E. Abigail Hathway, Department of Civil and Structural Engineering, University of Sheffield, Sheffield, UK
Eckart Lange, Department of Landscape, University of Sheffield, Sheffield, UK
Ed Morgan, Department of Landscape, University of Sheffield, Sheffield, UK
Daniela Romano, Department of Computer Science, University of Sheffield, Sheffield, UK

20 Real-Time Visual Simulation of Urban Sustainability

John P. Isaacs, School of Engineering, Computing and Applied Mathematics, University of Abertay Dundee, Dundee, K David J. Blackwood, School of Contemporary Sciences, University of Abertay Dundee, Dundee, UK Daniel Gilmour, School of Contemporary Sciences, University of Abertay Dundee, UK Ruth E. Falconer, SIMBIOS Centre, School of Contemporary Sciences, University of Abertay Dundee, Dundee, UK

43 Traffic Control and CO<sub>2</sub> Reduction: Utilisation of Virtual Modelling within University Estates Master Planning Richard Laing, Scott Sutherland School, Robert Gordon University, Aberdeen, UK Amar Bennadji, Scott Sutherland School, Robert Gordon University, Aberdeen, UK David Gray, Institute for Management Governance & Society, Robert Gordon University, Aberdeen, UK

58 Collaborative Environmental Knowledge Management

Haohui Chen, Department of Infrastructure Engineering, University of Melbourne, Melbourne, VIC, Australia Ian D. Bishop, Department of Infrastructure Engineering, University of Melbourne, Melbourne, VIC, Australia

### **BOOK REVIEW**

82 From Social Butterfly to Engaged Citizen

Titiana-Petra Ertiö, University of Turku, Finland

85 Web 2.0 Technologies and Civic Engagement in Urban Governance

Carlos Nunes Silva, Institute of Geography and Spatial Planning, University of Lisbon, Lisbon, Portugal

87 The Historical Background of Urban and Regional E-Planning

Carlos Nunes Silva, Institute of Geography and Spatial Planning, University of Lisbon, Lisbon, Portugal

### Copyright

The International Journal of E-Planning Research (ISSN 2160-9918; eISSN 2160-9926). Copyright © 2013 IGI Global. All rights, including translation into other languages reserved by the publisher. No part of this journal may be reproduced or used in any form or by any means without written permission from the publisher, except for noncommercial, educational use including classroom teaching purposes. Product or company names used in this journal are for identification purposes only. Inclusion of the names of the products or companies does not indicate a claim of ownership by IGI Global of the trademark or registered trademark. The views expressed in this journal are those of the authors but not necessarily of IGI Global.

The International Journal of E-Planning Research is currently listed or indexed in: Bacon's Media Directory; Cabell's Directories; Google Scholar; INSPEC; JournalTOCs; MediaFinder; ProQuest Advanced Technologies & Aerospace Journals; ProQuest Computer Science Journals; ProQuest Illustrata: Technology; ProQuest SciTech Journals; ProQuest Technology Journals; The Standard Periodical Directory; Ulrich's Periodicals Directory