# Contents

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rapid Indoor Data Acquisition Technique for Indoor Building Surveying for Cadastre Application</td>
<td>1</td>
</tr>
<tr>
<td>Ali Jamali, Pawel Boguslawski, Christopher M. Gold and Alias Abdul Rahman</td>
<td></td>
</tr>
<tr>
<td>Calculating Least Risk Paths in 3D Indoor Space</td>
<td>13</td>
</tr>
<tr>
<td>Ann Vanclooster, Philippe De Maeyer, Veerle Fack and Nico Van de Weghe</td>
<td></td>
</tr>
<tr>
<td>The Temporal Dimension in a 4D Archaeological Data Model: Applicability of the Geoinformation Standard</td>
<td>33</td>
</tr>
<tr>
<td>Berdien De Roo, Nico Van de Weghe, Jean Bourgeois and Philippe De Maeyer</td>
<td></td>
</tr>
<tr>
<td>From 3D City Modelling to 3D Country Modelling: First Tests on Scale-Dependent Rendering on Mobile Devices</td>
<td>57</td>
</tr>
<tr>
<td>Claire Ellul and Julia Altenbuchner</td>
<td></td>
</tr>
<tr>
<td>Towards Automatic Validation and Healing of CityGML Models for Geometric and Semantic Consistency</td>
<td>77</td>
</tr>
<tr>
<td>Nazmul Alam, Detlev Wagner, Mark Wewetzer, Julius von Falkenhausen, Volker Coors and Margitta Pries</td>
<td></td>
</tr>
<tr>
<td>A RESTful Service for Linking Sensors and Cellular Spaces</td>
<td>93</td>
</tr>
<tr>
<td>U. Isikdag</td>
<td></td>
</tr>
<tr>
<td>Exploring the Role of Genetic Algorithms and Artificial Neural Networks for Interpolation of Elevation in Geoinformation Models</td>
<td>107</td>
</tr>
<tr>
<td>Hossein Bagheri, Seyyed Yousef Sadjadi and Saeed Sadeghian</td>
<td></td>
</tr>
<tr>
<td>Automatic Generation of 3D Networks in CityGML and Design of an Intelligent Individual Evacuation Model for Building Fires Within the Scope of 3D GIS</td>
<td>123</td>
</tr>
<tr>
<td>U. Atila, I. R. Karas, M. K. Turan and A. A. Rahman</td>
<td></td>
</tr>
</tbody>
</table>
Bavarian 3D Building Model and Update Concept Based on LiDAR, Image Matching and Cadastre Information. ................................. 143
K. Aringer and R. Roschlaub

A 3D City Model with Dynamic Behaviour Based on Geospatial Managed Objects ......................................................... 159
E. Kjems and J. Kolář

A Repository of Information Visualization Techniques to Support the Design of 3D Virtual City Models .............................. 175
Claudine Métral, Nizar Ghoula, Vitor Silva and Gilles Falquet

Empirical Assessment of the Suitability of Visual Variables to Achieve Notarial Tasks Established from 3D Condominium Models ............................................ 195
Jacynthe Pouliot, Chen Wang, Frédéric Hubert and Vivien Fuchs

A Generic Augmented Reality Telescope for Heritage Valorization. ...... 211
Safwan Chendeb, Taha Ridene and Laure Leroy

The Usability of Online Geographic Virtual Reality for Urban Planning ................................................................. 225
Sisi Zhang and Antoni B. Moore

Developing CityGML Indoor ADE to Manage Indoor Facilities ....... 243
Yunji Kim, Hyeyoung Kang and Jiyeong Lee

Towards 3D Metadata for Discovering 3D Geospatial Models ........ 267
Alborz Zamyadi, Jacynthe Pouliot and Yvan Bédard

Towards a Property Registry 3D Model in Portugal: Preliminary Case Study Implementation Tests ................................. 291
José-Paulo de Almeida, Xiangyi Liu, Claire Ellul and Maria Manuel Rodrigues-de-Carvalho
Innovations in 3D Geo-Information Sciences
Isikdag, U. (Ed.)
2014, XII, 320 p. 182 illus., 142 illus. in color., Hardcover
ISBN: 978-3-319-00514-0