

# CONTENTS

## 1. AUTOMATION AND ROBOTICS APPLICATION

*Thomas Bock, Thomas Linner:*

|                                                                                   |    |
|-----------------------------------------------------------------------------------|----|
| <b>ENHANCED INDUSTRIALIZED CUSTOMIZATION PERFORMANCE BY EMBEDDED MICROSYSTEMS</b> | 02 |
|-----------------------------------------------------------------------------------|----|

*Thomas Bock, Thomas Linner, Nora Eibisch, Willi Viktor Lauer:*

|                                                                               |    |
|-------------------------------------------------------------------------------|----|
| <b>FUSION OF PRODUCT AND AUTOMATED-REPLICATIVE PRODUCTION IN CONSTRUCTION</b> | 12 |
|-------------------------------------------------------------------------------|----|

*Chang-Yeon Cho, Jung Yeol Kim, Moon-Young Cho, Jun Bok Lee, Soon-Wook Kwon, Young-Suk Kim:*

|                                                                                                                             |    |
|-----------------------------------------------------------------------------------------------------------------------------|----|
| <b>SIMULATION METHOD OF CONSTRUCTION HOIST OPERATING PLAN FOR HIGH RISE BUILDINGS CONSIDERING LIFTING HEIGHTS AND LOADS</b> | 22 |
|-----------------------------------------------------------------------------------------------------------------------------|----|

*Rauno Heikkilä, Teemu Kivimäki, Anja Leppälä, Martti Mikkonen, Ty A. Lasky:*

|                                                                                                               |    |
|---------------------------------------------------------------------------------------------------------------|----|
| <b>3D CALIBRATION OF GPR (GROUND PENETRATING RADAR) FOR BRIDGE MEASUREMENTS – CASE KAJAANI VARIKKO BRIDGE</b> | 29 |
|---------------------------------------------------------------------------------------------------------------|----|

*Rauno Heikkilä, Teemu Kivimäki, Martti Mikkonen, Ty A. Lasky:*

|                                                                                                       |    |
|-------------------------------------------------------------------------------------------------------|----|
| <b>STOP &amp; GO SCANNING FOR HIGHWAYS – 3D CALIBRATION METHOD FOR A MOBILE LASER SCANNING SYSTEM</b> | 40 |
|-------------------------------------------------------------------------------------------------------|----|

*Rauno Heikkilä, Teemu Kivimäki, Ty A. Lasky:*

|                                                                                                                                                                               |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| <b>DEVELOPMENT OF AN OVERALL FUNCTIONAL PROCESS UTILIZING 3D DATA MODELS AND AUTOMATION FOR REHABILITATION OF ROAD STRUCTURES – CASE VT4, HAURUKYLÄ-HAARANSILTA (3D-ROAD)</b> | 49 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|

*Rauno Heikkilä, Teemu Kivimäki, Katja Puolitaival:*

|                                                                                              |    |
|----------------------------------------------------------------------------------------------|----|
| <b>LATENT POTENTIALS OF AUTOMATION FOR DEEP STABILIZATION MACHINES AND WORKING PROCESSES</b> | 64 |
|----------------------------------------------------------------------------------------------|----|

*Rauno Heikkilä, Teemu Kivimäki, Katja Puolitaival:*

|                                                                                                                            |    |
|----------------------------------------------------------------------------------------------------------------------------|----|
| <b>DEVELOPMENT OF AUTOMATION FOR FOUNDATION ENGINEERING – CASE PILING MACHINE AND THE WORKING PROCESS OF DRIVEN PILING</b> | 73 |
|----------------------------------------------------------------------------------------------------------------------------|----|

*Shigeru Sarata, Noriho Koyachi, Takashi Tsubouchi:*

|                                                                                       |    |
|---------------------------------------------------------------------------------------|----|
| <b>IMPROVED PATH PLANNING METHOD FOR AUTONOMOUS LOADING OPERATION BY WHEEL LOADER</b> | 81 |
|---------------------------------------------------------------------------------------|----|

*Javad Majrouhi Sardroud, Mukesh C. Limbachiya:*

|                                                                                                   |    |
|---------------------------------------------------------------------------------------------------|----|
| <b>INTEGRATED ADVANCE DATA STORAGE TECHNOLOGY FOR EFFECTIVE CONSTRUCTION LOGISTICS MANAGEMENT</b> | 89 |
|---------------------------------------------------------------------------------------------------|----|

*Hyojoo Son, Changwan Kim:*

**REALISTIC 3D MODELING SYSTEM FOR REMOTE CONTROLLED  
CONSTRUCTION MACHINES: MULTISENSOR FUSION BASED APPROACH** 99

*Zhenhua Zhu, Ibrahima J. Ndiour, Ioannis Brilakis, Patricio A. Vela:*

**IMPROVEMENTS TO CONCRETE COLUMN DETECTION IN LIVE VIDEO** 108

## **2. ROBOT TECHNOLOGY**

*Thomas Bock, Pranav Kishore, Thomas Linner, Willi Viktor Lauer:*

**MECHATRONICS ASSISTED ARCHITECTURE** 119

*Jia-Ruey Chang, Feng-Chi Yu, Tsun-Cheng Huang, Shih-Chung Kang, Shang-Hsien Hsieh:*

**VIRTUAL REFERENCE STATION (VRS)-BASED INTELLIGENT ROBOT  
(PIONEER 3-AT) TO ASSIST IN PAVEMENT INSPECTIONS** 129

*Chang-Seop Lee, Dongnam Kim, Baeksuk Chu, Daehie Hong:*

**A STUDY ON GAIN SCHEDULING OF INTELLIGENT EXCAVATOR** 139

*Dongnam Kim, Kyeong Won Oh, Namhoon Kim, Baeksuk Chu, Daehie Hong, Yoon Ki Kim,  
Suk-Hie Hong:*

**DESIGN OF HAPTIC DEVICE FOR EXCAVATOR WITH PRESSURE  
TRANSMITTER** 147

*Roberto Medina, Jaime Gómez-García-Bermejo, Eduardo Zalama:*

**AUTOMATED VISUAL INSPECTION OF ROAD SURFACE CRACKS** 155

*Kenichi Ohara, Shinji Yonesaka, Tomohito Takubo, Yasushi Mae, Tatsuo Arai:*

**RT MODULE DESIGN FOR HOME AND BUILDING AUTOMATION** 165

*Danijel Rebolj, Martin Fischer, Drew Endy, Thomas Moore:*

**NANO-TO-METER-SCALE AUTOMATED BUILDING** 175

*Stewart Thomas, Matthew Reynolds, Jochen Teizer:*

**ELECTROMAGNETIC ENERGY HARVESTING FOR SENSING,  
COMMUNICATION AND ACTUATION** 183

*Ying-Hao Yu, S. Kodagoda and Q. P. Ha:*

**FPGA-BASED UBIQUITOUS COMPUTING INTELLIGENCE FOR ROBOTIC  
FORMATION CONTROL** 193

## **3. AUTOMATED DATA ACQUISITION AND MONITORING**

*Omar Arif, Matt Marshall, Wayne Daley, Patricio A. Vela, Jochen Teizer, Soumitry J. Ray,  
John Stewart:*

**TRACKING AND CLASSIFYING OBJECTS ON A CONVEYOR BELT USING  
TIME-OF-FLIGHT CAMERA** 203

|                                                                                                                                                                                                                 |     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| <i>Salman Azhar, Justin W. Brown, Anoop Sattineni:</i><br><b>A CASE STUDY OF BUILDING PERFORMANCE ANALYSES USING BUILDING INFORMATION MODELING</b>                                                              | 213 |
| <i>Alessandro Carbonari, Angelo Biscotti, Berardo Naticchia, Federico Robuffo, Mario De Grassi:</i><br><b>A MANAGEMENT SYSTEM AGAINST MAJOR RISK ACCIDENTS IN LARGE CONSTRUCTION SITES</b>                      | 223 |
| <i>Soungcho CHAE, Takahiro Nakamura:</i><br><b>A STUDY OF WIRELESS LAN BASED WORKING AREA ESTIMATION</b>                                                                                                        | 233 |
| <i>Lee, Dong-Gun, - Cha, Hee-Sung, - Kim, Sik, - Seo, Hae-Doo:</i><br><b>DEVELOPMENT OF BIM STANDARD DATABASE SYSTEM FOR THE REMODELING OF DETERIORATED APARTMENT</b>                                           | 243 |
| <i>Umberto C. Gatti, Giovanni C. Migliaccio, Suzanne Schneider, Rafael Fierro:</i><br><b>ASSESSING PHYSICAL STRAIN IN CONSTRUCTION WORKFORCE: A FIRST STEP FOR IMPROVING SAFETY AND PRODUCTIVITY MANAGEMENT</b> | 255 |
| <i>Hamid Hajian, Burcin Becerik-Gerber:</i><br><b>SCAN TO BIM: FACTORS AFFECTING OPERATIONAL AND COMPUTATIONAL ERRORS AND PRODUCTIVITY LOSS</b>                                                                 | 265 |
| <i>Itai Katz, Kamel Saidi, Alan Lytle:</i><br><b>MODEL-BASED 3D TRACKING IN MULTIPLE CAMERA VIEWS</b>                                                                                                           | 273 |
| <i>Byungil Kim, Changyoon Kim, Wonil Lee, Hyoungkwan Kim:</i><br><b>INTERACTIVE MODELLER FOR EQUIPMENT OPERATION IN LONG-SPAN BRIDGE CONSTRUCTION</b>                                                           | 280 |
| <i>Changyoon Kim, Byungil Kim, Hyunsu Lim, Hyoungkwan Kim:</i><br><b>INTERACTIVE COMMUNICATION PLATFORM FOR CONSTRUCTION MANAGEMENT USING MOBILE COMPUTING AND AUGMENTED REALITY</b>                            | 288 |
| <i>Peter Kyrinovič, Alojz Kopáček:</i><br><b>AUTOMATED MEASUREMENT SYSTEM FOR CRANE RAIL GEOMETRY DETERMINATION</b>                                                                                             | 294 |
| <i>Berardo Naticchia, Alberto Giretti, Alessandro Carbonari, Massimo Vaccarini:</i><br><b>A REAL-TIME AND NON INTRUSIVE STRUCTURAL HEALTH MONITORING SYSTEM FOR BUILDINGS</b>                                   | 306 |
| <i>Shigeomi Nishigaki, Katsutoshi Saibara, Yoshio Kaneda, Toshinori Oka, Makoto Hasegwa, Hiroshi Ogura, Fujio Matsuda:</i><br><b>LINE BALANCE AND DRIVE BEARING IN HAULAGE WORK</b>                             | 316 |

*Shigeomi Nishigaki, Katsutoshi Saibara, Shigeo Kitahara, Hideaki Satoh, Makoto Hasegawa, Hiroshi Ogura, Fujio Matsuda:*  
**LHD REMOTE MONITORING AND MANAGEMENT BASED ON  
 DELAY/DESRUPTION TOLERANT NETWORK** 326

*Shigeomi Nishigaki, Katsutoshi Saibara, Shigeo Kitahara, Masaharu Moteki:*  
**WORK EFFICIENCY EVALUATION MODEL** 336

*Anoop Sattineni, Salman Azhar:*  
**TECHNIQUES FOR TRACKING RFID TAGS IN A BIM MODEL** 346

*Hyojoo Son, Changmin Kim, Changwan Kim:*  
**A COMPARATIVE STUDY ON COLOR MODEL-BASED CONCRETE IMAGE  
 RETRIEVAL IN DIFFERENT INVARIANT COLOR SPACES** 355

*Herman Wahid, Hiep Nguyen-Duc, Q. P. Ha:*  
**RADIAL BASIS FUNCTION NEURAL NETWORK METAMODELLING FOR 2-D  
 RESISTIVITY MAPPING** 364

*Seokjoon You, Soonwook Kwon, Seungwoo Jung, Moonyoung Cho, Hoki Kim:*  
**MERGING POINT CLOUDS FROM HETEROGENEOUS 3D SCANNERS FOR  
 FAST UPDATE OF AN EARTHWORK SITE MODEL** 374

*Ivan Zapletal:*  
**OPTIMISING THERMAL INSULATION OF BUILDINGS BY INFLUENCE OF THE  
 SERVICE LIFE BY HELP COMPUTERS** 382

#### **4. INFORMATION AND COMPUTATIONAL TECHNOLOGY**

*Guzide Atasoy, Pingbo Tang, Jiansong Zhang, Burcu Akinci:*  
**VISUALIZING LASER SCANNER DATA FOR BRIDGE INSPECTION** 390

*Min-Yuan Cheng, Kuo-Yu Huang, Hung-Ming Chen:*  
**A PARTICLE SWARM OPTIMIZATION BASED CHAOTIC K-MEANS  
 EVOLUTIONARY APPROACH** 400

*Min-Yuan Cheng, Chia-Chi Hsiang, Hsing-Chih Tsai, Hoang-Linh, Do:*  
**ENHANCING BID DECISION MAKING IN THE CONSTRUCTION INDUSTRY: A  
 NEW MULTI-CRITERIA PROSPECT MODEL** 410

*Seokho Chi, Carlos H. Caldas:*  
**MODELING OBJECT IDENTIFICATION AND TRACKING ERRORS ON IMAGE-  
 BASED SAFETY ASSESSMENT OF EARTHMOVING OPERATIONS** 420

*Jui-Sheng Chou, Hsin Wang, Hsien-Cheng Tseng:*  
**PROJECT DATA WAREHOUSE MANAGEMENT WITH MULTIVARIATE  
 ANALYSIS** 430

|                                                                                                                                                                                       |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| <i>Jozef Gašparik, Marián Gašparik:</i><br><b>MACHINE SELECTION OPTIMIZING METHOD FOR BUILDING PROCESSES<br/>WITH SOFTWARE SUPPORT</b>                                                | 440 |
| <i>Rong-Yau Huang, I-Shiang Mao:</i><br><b>ESTIMATION OF BRIDGE LIFE CYCLE MAINTENANCE COSTS USING<br/>RELIABILITY BASED MODEL</b>                                                    | 450 |
| <i>Čeněk Jarský:</i><br><b>MODELLING OF THE BUILDING PROCESS IN CONSTRUCTION PLANNING<br/>AND MANAGEMENT USING I. T.</b>                                                              | 461 |
| <i>Youngsoo Jung, Mihee Joo:</i><br><b>BIM FRAMEWORK: VARIABLES FOR THEORY AND IMPLEMENTATION</b>                                                                                     | 471 |
| <i>Hiam Khoury, Vineet Kamat:</i><br><b>CONTEXTUAL INFORMATION DELIVERY ON CONSTRUCTION SITES</b>                                                                                     | 480 |
| <i>Changhwan Kim, Soonwook Kwon, Seokjoon You, JungA Lim:</i><br><b>USING INFORMATION DELIVERY MANUAL (IDM) FOR EFFICIENT<br/>EXCHANGE OF BUILDING DESIGN INFORMATION</b>             | 490 |
| <i>Hyunjoo Kim, Annette Stumpf, Richard Schneider:</i><br><b>DEVELOPING ENERGY EFFICIENT BUILDING DESIGN IN MACHINE<br/>LEARNING</b>                                                  | 498 |
| <i>Teemu Kivimäki, Rauno Heikkilä:</i><br><b>BRIDGE INFORMATION MODELLING (BRIM) AND MODEL UTILIZATION AT<br/>WORKSITES IN FINLAND</b>                                                | 505 |
| <i>Choong Wan Koo, Sang Hyuk Park, Jae Won Shin, O Kyung Kwon:</i><br><b>INTEGRATED DESIGN MANAGEMENT SYSTEM FOR IMPROVING EFFECTIVE<br/>DESIGN COOPERATION THROUGH DOCUMENTATION</b> | 514 |
| <i>Jose Llamas, Álvaro Melero, Eduardo Zalama, Jaime Gómez-García-Bermejo:</i><br><b>A 3D SNAKE APPROACH FOR EXTRACTING PLANS OF HERITAGE<br/>BUILDINGS</b>                           | 524 |
| <i>Peter Makýš:</i><br><b>THE AUTOMATION OF CONSTRUCTION SCHEDULING CONSIDERING<br/>VARIABILITY OF WORKING ENVIRONMENT</b>                                                            | 534 |
| <i>František Mesároš, Peter Mesároš:</i><br><b>DIGITAL COMPETENCIES IN PROCESS OF CREATING THE KNOWLEDGE<br/>COMPANY IN CONSTRUCTION SECTOR</b>                                       | 544 |
| <i>Yan-Chyuan Shiau, Tsung-Pin Tsai, Jia-Chu Lin, Chih-Tsun Hsiao:</i><br><b>DEVELOPMENT OF CAMPUS SPACE NAVIGATION AND GUIDE SYSTEM</b>                                              | 551 |

|                                                                                                                                                                                                            |     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| <i>Yan-Chyuan Shiau, Ming-Teh Wang, Meng-Jia Yeh, Shang-Fong Chen:</i><br><b>USE RFID TO ESTABLISH SITE BUILDING MATERIAL MANAGEMENT SYSTEM</b>                                                            | 561 |
| <i>Koshy Varghese, Mehuli Majumdar:</i><br><b>VISUALIZATION AND COMMUNICATION PLATFORM FOR REMOTE MONITORING OF INFRASTRUCTURE PROJECTS</b>                                                                | 571 |
| <i>Ji-Wei Wu, Judy C.R. Tseng, Wen-der Yu, Jyh-bin Yang, Wen-Nung Tsai, Shun-Min Lee:</i><br><b>A PILOT STUDY ON ENHANCING THE APPLICATION OF KNOWLEDGE MANAGEMENT SYSTEMS USING SEMANTIC SEGMENTATION</b> | 578 |

## 5. MANAGEMENT AND SOCIAL ISSUES

|                                                                                                                                                                |     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| <i>Thomas Bock, Thomas Linner, Gerhard Fabritz, Georgi Temelkov, Maria Malinova, Dimitrina Jegova:</i><br><b>AUTOMATION AND ROBOTIC ASSISTED LIVING</b>        | 589 |
| <i>Thomas Bock, Thomas Linner:</i><br><b>INDIVIDUALIZATION OF DESIGN VARIATION IN CONSTRUCTION</b>                                                             | 597 |
| <i>Pei-Lun Chang, Wen-Der Yu, Shao-Tsai Cheng, Shun-Min Lee:</i><br><b>EXPLORING UNDERLYING PATTERNS OF EMERGENT PROBLEM-SOLVING IN CONSTRUCTION WITH TRIZ</b> | 607 |
| <i>Min-Yuan Cheng, Hsien-Sheng Peng, Chih-Min Huang, Yu-Han Chang:</i><br><b>ESTABLISHING THE KM-ORIENTED BPR MODEL FOR CONSTRUCTION FIRM – A CASE STUDY</b>   | 617 |
| <i>F.J.M. van Gassel, J.E.M.H. van Bronswijk:</i><br><b>WORKING METHOD TO ENHANCE END-USER VALUE FOR AGING-IN-PLACE</b>                                        | 627 |
| <i>Sae-Hyun Ji, Moonseo Park, Hyun-Soo Lee, You-Sang Yoon:</i><br><b>DATA PREPROCESSING METHOD FOR COST ESTIMATION OF BUILDING PROJECTS</b>                    | 634 |
| <i>Ming-Hsiu Tsai, Kuan-Ju Wang:</i><br><b>NEW SERVICE DEVELOPMENT MODEL FOR PROPERTY MANAGEMENT COMPANY</b>                                                   | 644 |
| <i>Remy D. van der Vlies, Ger J. Maas:</i><br><b>MANAGING PERFORMANCE BASED BUILDING OF SMART HOMES</b>                                                        | 654 |
| <i>Wei-Chih Wang, Chia-Li Lin and Ming-Tsung Lee:</i><br><b>USING SIA AND DEMATEL TO IDENTIFY THE FACTORS AFFECTING DESIGN DELAYS</b>                          | 667 |

Jyh-Bin Yang, Kuei-Mei Huang, Chang-Hung Lee:

**EVALUATION OF DELAY ANALYSIS METHODOLOGIES ON LOST PRODUCTIVITY IN CONSTRUCTION PROJECTS**

677

Adel Alshibani, Osama Moselhi

**AUTOMATED SYSTEM FOR PRODUCTIVITY ASSESSEMENT OF EARTHMOVING OPERATIONS**

684

Achiel Sturm

**SITE AUTOMATION – DOES IT PAY OFF?**

694

**6. ROBOTICS HISTORY**

Thomas Bock, Willi Viktor Lauer:

**LOCATION ORIENTATION MANIPULATOR BY KONRAD WACHSMANN, JOHN BOLLINGER AND XAVIER MENDOZA**

704

Thomas Bock, Nora Eibisch:

**THE HELIX-TOWER BY KONRAD ZUSE AUTOMATED CON- AND DECONSTRUCTION**

713

Pavel Svoboda, Jana Beranová, Vjačeslav Usmanov:

**ROBOTIZATION IN CONSTRUCTION**

723

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732

**INTRODUCTION**

For a long time the focus of innovation in the area of automation and robotics in construction has been laid on the industrialized and rationalized off-site or on site construction as well as on related processes, building systems, management and/or logistic tools and high-tech construction/prefabrication robotic equipment. Yet, today, the complexity of buildings continues to rise rapidly due to new paradigms as Ubiquitous Computing (Kaumm, 2010), the demand for energy efficiency (Lechner, 2009) and emerging assistance technologies (Bock et al., 2002). Buildings become integrated with a multitude of new sub-systems (Elieci, 2009) and extend their performance to areas which have formerly not been accounted as being part of construction and building industry, yet, which now gradually merge with our built environment. With that development the question rises if a solitary focus on construction technologies still helps to improve the advance of automation and robotics in construction or if it could be reasonable to analyze the impact of buildings' developing new performance scope on building systems and industrialized production methods. With the integration of Microsystems Technology into buildings and due to the tendency towards more and more user integration (Piller, 2005), buildings become not only more intelligent but they can be much more personalized to the inhabitants needs and could further serve as platforms for a multitude of continuous and commercial services. These changes could have a tremendous impact on the whole value chain and are likely to transform building structures, construction technologies and business models. In order to maintain the frontier science character of