Advances in Intelligent Systems and Computing

Volume 454

Series editor

Janusz Kacprzyk, Polish Academy of Sciences, Warsaw, Poland

e-mail: kacprzyk@ibspan.waw.pl

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Information Technology and Intelligent Transportation Systems

Volume 1, Proceedings of the 2015 International Conference on Information Technology and Intelligent Transportation Systems ITITS 2015, held December 12–13, 2015, Xi'an China



Editors
Valentina Emilia Balas
Department of Automation and Applied
Informatics, Faculty of Engineering
Aurel Vlaicu University of Arad
Arad
Romania

Lakhmi C. Jain Bournemouth University Poole UK Xiangmo Zhao School of Information Engineering Chang'an University Xi'an China

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Preface

These volumes constitute the Proceedings of the 2015 International Conference on Information Technology and Intelligent Transportation Systems (ITITS 2015) held in Xi'an, China during December 12–13, 2015. The Conference ITITS 2015 was sponsored by Shaanxi Computer Society and co-sponsored by Chang'an University, Xi'an University of Technology, Northwestern Poly-technical University, CAS, Shaanxi Sirui Industries Co., Ltd.

The book covers a broad spectrum of intelligent techniques, theoretical and practical applications employing knowledge and intelligence to find solutions for intelligent transportation systems and other applications.

The conference papers included in these proceedings, published post-conference, were grouped into the following parts:

Volume I—Part II: Theory Research in Intelligent Transportation Systems

Volume I—Part III: Application and Technologies in Intelligent Transportation

Volume II—Part I: Management Issues on Intelligent Transportation

Volume II—Part II: Information Technology, Electronic and Control System

At ITITS 2015 we had 12 eminent keynote speakers: Profs. Asad J. Khattak (USA), Robert L. Bertini (USA), Heng Wei (USA), Ping Yi (USA), Haizhong Wang (USA), Jonathan Corey (USA), Zhixia (Richard) Li (USA), Guohui Zhang (USA), Luke Liu (USA), Yu Zhang (USA), Valentina E. Balas (Romania), and Lakhmi C. Jain (UK). Their summary talks are included in this book.

Intelligent transport systems vary in technologies applied, from basic management systems to more application systems, and information technology also plays tightly with intelligent transportation systems including wireless communication, computational technologies, floating car data/floating cellular data, sensing technologies, and video vehicle detection; and technologies of intelligent transportation systems also include topics from theoretical and application topics, such as emergency vehicle notification systems, automatic road enforcement, collision avoidance systems, and some cooperative systems. The conference also fostered cooperation among organizations and researchers involved in the merging fields by

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inviting worldwide well-known professors to further explore these topics and discuss in depth the technical presentations with the presenters, including 12 invited speakers and over 200 participants. The conference received overwhelming response with 330 submissions from five countries and regions, and each paper was doubly peer reviewed by at least three reviewers, and finally more than 120 papers were accepted.

We would like to thank the authors of the submitted papers for keeping the quality of the ITITS 2015 Conference at high levels. The editors of this book would like to acknowledge all the authors for their contributions and also the reviewers. We have received invaluable help from the members of the International Program Committee and the Chairs responsible for different aspects of the Workshop.

Special thanks go to Janusz Kacprzyk (Editor in Chief, Springer, Advances in Intelligent Systems and Computing Series) for the opportunity to organize these guest-edited volumes.

We are grateful to Springer, especially to Dr. Thomas Ditzinger (Senior Editor, Applied Sciences & Engineering Springer-Verlag) for the excellent collaboration, patience, and help during the evolvement of this volume.

We hope that the volumes will provide useful information to professors, researchers, and graduate students in the area of intelligent transportation.

Arad, Romania Poole, UK Xi'an, China Valentina Emilia Balas Lakhmi C. Jain Xiangmo Zhao

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Jonathan Corev

Lakhmi C. Jain

Luke Liu

Ping Yi

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