Lecture Notes in Computer Science 9247

Commenced Publication in 1973
Founding and Former Series Editors:
Gerhard Goos, Juris Hartmanis, and Jan van Leeuwen

More information about this series at http://www.springer.com/series/7411

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Internet of Things, Smart Spaces, and Next Generation Networks and Systems

15th International Conference, NEW2AN 2015
and 8th Conference, ruSMART 2015
St. Petersburg, Russia, August 26–28, 2015
Proceedings

Springer

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ISSN 0302-9743 ISSN 1611-3349 (electronic)
Lecture Notes in Computer Science
ISBN 978-3-319-23125-9 ISBN 978-3-319-23126-6 (eBook)
DOI 10.1007/978-3-319-23126-6

Library of Congress Control Number: 2015946749

LNCS Sublibrary: SL5 – Computer Communication Networks and Telecommunications

Springer Cham Heidelberg New York Dordrecht London

Printed on acid-free paper

Springer International Publishing AG Switzerland is part of Springer Science+Business Media (www.springer.com)

Preface

We welcome you to the joint proceedings of the 15th NEW2AN (Next-Generation Wired/Wireless Advanced Networks and Systems) and 8th conference on Internet of Things and Smart Spaces ruSMART (Are You Smart) held in St. Petersburg, Russia, during August 26–28, 2015.

Originally, the NEW2AN conference was launched by ITC (International Teletraffic Congress) in St. Petersburg in June 1993 as an ITC-Sponsored Regional International Teletraffic Seminar. The first edition was entitled "Trafffic Management and Routing in SDH Networks" and held by R&D LONIIS. In 2002, the event received its current name, NEW2AN. In 2008, NEW2AN acquired a new companion in Smart Spaces, ruSMART, hence boosting interaction between researchers, practitioners, and engineers across different areas of ICT. From 2012, the scope of ruSMART conference has been extended to cover the Internet of Things and related aspects.

Presently, NEW2AN and ruSMART are well-established conferences with a unique cross-disciplinary mixture of telecommunications-related research and science. NEW2AN/ruSMART is accompanied by outstanding keynotes from universities and companies across Europe, USA, and Russia.

The 15th NEW2AN technical program addresses various aspects of advanced wireless networks. This year, particular attention was paid to mobile ad hoc, sensor, and cloud networks, emerging cellular systems and their components, as well as contemporary signal and circuit design. In particular, the contributors have proposed novel and innovative systems and techniques for streaming, video, and other higher-layer applications, as well as for optical and satellite systems. It is also worth mentioning the rich coverage of business and services aspects of next-generation communication networks, advanced materials for communication systems and their properties, and information security.

The 8th conference on Internet of Things and Smart Spaces, ruSMART 2015, provided a forum for academic and industrial researchers to discuss new ideas and trends in the emerging areas of Internet of Things and smart spaces that create new opportunities for fully customized applications and services. The conference brought together leading experts from top affiliations around the world. This year, we saw good participation from representatives of various players in the field, including academic teams and industrial world-leader companies, particularly representatives of Russian R&D centers, which have a good reputation for high-quality research and business in innovative service creation and applications development.

This year, the first day of the NEW2AN/ruSMART technical program started with the keynote talk on "Securing the Internet of Things: Opportunities and Challenges with Scaling IoT Solutions" given by Rob van den Dam, who is Global Telecommunications Industry Leader, at IBM Institute for Business Value in The Netherlands.

We would like to thank the Technical Program Committee members, as well as the associated reviewers, for their hard work and important contribution to the conference.

This year, the conference program met the highest-quality criteria with an acceptance ratio of around 35%.

The current edition of NEW2AN/ruSMART was organized in cooperation with Open Innovations Association FRUCT, IEEE, St. Petersburg State Polytechnical University, Tampere University of Technology, Technopark and ISST lab of NRU ITMO, St. Petersburg State University of Telecommunications, and Popov Society. The support of these organizations is gratefully acknowledged.

We also wish to thank all those who contributed to the organization of the conference. In particular, we are grateful to Roman Florea for his substantial work in supporting the conference website and his excellent job on the compilation of camera-ready papers and interaction with Springer.

We believe that the 15th NEW2AN and 8th ruSMART conferences delivered an informative, high-quality, and up-to-date scientific program. We also hope that participants enjoyed both the technical and social conference components, the Russian ways of hospitality, and the beautiful city of St. Petersburg.

August 2015

Sergey Balandin
Sergey Andreev
Yevgeni Koucheryavy

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