

Communications
in Computer and Information Science

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Advances in Computing and Communications

First International Conference, ACC 2011
Kochi, India, July 22-24, 2011
Proceedings, Part I

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ISSN 1865-0929	e-ISSN 1865-0937
ISBN 978-3-642-22708-0	e-ISBN 978-3-642-22709-7
DOI 10.1007/978-3-642-22709-7	
Springer Heidelberg Dordrecht London New York	

Library of Congress Control Number: Applied for

CR Subject Classification (1998): C.2, H.4, I.2, H.3, D.2, H.5

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Typesetting: Camera-ready by author, data conversion by Scientific Publishing Services, Chennai, India

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

Preface

The First International Conference on Advances in Computing and Communications (ACC 2011) was held in Kochi during July 22–24, 2011. ACC 2011 was organized by Rajagiri School of Engineering & Technology (RSET) in association with the Association of Computing Machinery (ACM)- SIGWEB, Machine Intelligence Research Labs (MIR Labs), International Society for Computers and Their Applications, Inc. (ISCA), All India Council for Technical Education (AICTE), Indira Gandhi National Open University (IGNOU), Kerala State Council for Science, Technology and Environment (KSCSTE), Computer Society of India (CSI)- Div IV and Cochin Chapter, The Institution of Electronics and Telecommunication Engineers (IETE), The Institution of Engineers (India) and Project Management Institute (PMI), Trivandrum, Kerala Chapter. Established in 2001, RSET is a premier professional institution striving for holistic excellence in education to mould young, vibrant engineers.

ACC 2011 was a three-day conference which provided an opportunity to bring together students, researchers and practitioners from both academia and industry. ACC 2011 was focused on advances in computing and communications and it attracted many local and international delegates, presenting a balanced mixture of intellects from the East and from the West. ACC 2011 received 592 research papers from 38 countries including Albania, Algeria, Bangladesh, Brazil, Canada, Colombia, Cyprus, Czech Republic, Denmark, Ecuador, Egypt, France, Germany, India, Indonesia, Iran, Ireland, Italy, Korea, Kuwait, Malaysia, Morocco, New Zealand, P.R. China, Pakistan, Rwanda, Saudi Arabia, Singapore, South Africa, Spain, Sri Lanka, Sweden, Taiwan, The Netherlands, Tunisia, UK, and USA. This clearly reflects the truly international stature of ACC 2011. All papers were rigorously reviewed internationally by an expert technical review committee comprising more than 300 members. The conference had a peer-reviewed program of technical sessions, workshops, tutorials, and demonstration sessions.

There were several people that deserve appreciation and gratitude for helping in the realization of this conference. We would like to thank the Program Committee members and additional reviewers for their hard work in reviewing papers carefully and rigorously. After careful discussions, the Program Committee selected 234 papers (acceptance rate: 39.53%) for presentation at the conference. We would also like to thank the authors for having revised their papers to address the comments and suggestions by the referees.

The conference program was enriched by the outstanding invited talks by Ajith Abraham, Subir Saha, Narayan C. Debnath, Abhijit Mitra, K. Chandra Sekaran, K. Subramanian, Sudip Misra, K.R. Srivathsan, Jaydip Sen, Joyati Debnath and Junichi Suzuki. We believe that ACC 2011 delivered a high-quality, stimulating and enlightening technical program. The tutorials covered topics of

great interest to the cyber forensics and cloud computing communities. The tutorial by Avinash Srinivasan provided an overview of the forensically important artifacts left behind on a MAC computer. In his tutorial on “Network Forensics,” Bhadran provided an introduction to network forensics, packet capture and analysis techniques, and a discussion on various RNA tools. The tutorial on Next-Generation Cloud Computing by Pethuru Raj focused on enabling technologies in cloud computing.

The ACC 2011 conference program also included five workshops: International Workshop on Multimedia Streaming (MultiStreams 2011), Second International Workshop on Trust Management in P2P Systems (IWTMP2PS 2011), International Workshop on Cloud Computing: Architecture, Algorithms and Applications (CloudComp 2011), International Workshop on Identity: Security, Management and Applications (ID2011) and International Workshop on Applications of Signal Processing (I-WASP 2011). We thank all the workshop organizers as well as the Workshop Chair, El-Sayed El-Alfy, for their accomplishment to bring out prosperous workshops. We would like to express our gratitude to the Tutorial Chairs Patrick Seeling, Jaydeep Sen, K.S. Mathew, and Roksana Boreli and Demo Chairs Amitava Mukherjee, Bhadran V.K., and Janardhanan P.S. for their timely expertise in reviewing the proposals. Moreover, we thank Publication Chairs Pruet Boonma, Sajid Hussain and Hiroshi Wada for their kind help in editing the proceedings. The large participation in ACC2011 would not have been possible without the Publicity Co-chairs Victor Govindaswamy, Arun Saha and Biju Paul.

The proceedings of ACC 2011 are organized into four volumes. We hope that you will find these proceedings to be a valuable resource in your professional, research, and educational activities whether you are a student, academic, researcher, or a practicing professional.

July 2011

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Jaime Lloret Mauri
John F. Buford
Junichi Suzuki
Sabu M. Thampi

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ACC 2011 was jointly organized by the Department of Computer Science and Engineering and Department of Information Technology, Rajagiri School of Engineering and Technology (RSET), Kochi, India, in cooperation with ACM/SIGWEB.

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