

**PROCEEDINGS OF
THE 2014 INTERNATIONAL CONFERENCE ON
FRONTIERS IN EDUCATION: COMPUTER SCIENCE &
COMPUTER ENGINEERING**

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Editors

**Hamid R. Arabnia
Azita Bahrami, Leonidas Deligiannidis
George Jandieri**

Associate Editors

**Ashu M. G. Solo
Fernando G. Tinetti**



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Foreword

It gives us great pleasure to introduce this collection of papers to be presented at the 2014 International Conference on Frontiers in Education: Computer Science and Computer Engineering (FECS'14), July 21-24, 2014, at Monte Carlo Resort, Las Vegas, USA.

An important mission of the World Congress in Computer Science, Computer Engineering, and Applied Computing (a federated congress to which this conference is affiliated with) includes *"Providing a unique platform for a diverse community of constituents composed of scholars, researchers, developers, educators, and practitioners. The Congress makes concerted effort to reach out to participants affiliated with diverse entities (such as: universities, institutions, corporations, government agencies, and research centers/labs) from all over the world. The congress also attempts to connect participants from institutions that have **teaching** as their main mission with those who are affiliated with institutions that have **research** as their main mission. The congress uses a quota system to achieve its institution and geography diversity objectives."* By any definition of diversity, this congress is among the most diverse scientific meeting in USA. We are proud to report that this federated congress has authors and participants from 78 different nations representing variety of personal and scientific experiences that arise from differences in culture and values. As can be seen (see below), the program committee of this conference as well as the program committee of all other tracks of the federated congress are as diverse as its authors and participants.

The program committee would like to thank all those who submitted papers for consideration. About 58% of the submissions were from outside the United States. Each submitted paper was peer-reviewed by two experts in the field for originality, significance, clarity, impact, and soundness. In cases of contradictory recommendations, a member of the conference program committee was charged to make the final decision; often, this involved seeking help from additional referees. In addition, papers whose authors included a member of the conference program committee were evaluated using the double-blinded review process. One exception to the above evaluation process was for papers that were submitted directly to chairs/organizers of pre-approved sessions/workshops; in these cases, the chairs/organizers were responsible for the evaluation of such submissions. The overall paper acceptance rate for regular papers was 26; 18% of the remaining papers were accepted as poster papers (at the time of this writing, we had not yet received the acceptance rate for a few individual tracks.)

We are very grateful to the many colleagues who offered their services in organizing the conference. In particular, we would like to thank the members of the Program Committee of FECS'14, members of the congress Steering Committee, and members of the committees of federated congress tracks that have topics within the scope of FECS. Many individuals listed below, will be requested after the conference to provide their expertise and services for selecting papers for publication (extended versions) in journal special issues as well as for publication in a set of research books (to be prepared for publishers including: Springer, Elsevier, BMC, and others).

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- Dr. Ateet Bhalla; Department of Computer Science and Engineering, Oriental Institute of Science and Technology, Bhopal, India; Formerly at National Institute of Informatics, Tokyo, Japan and INESC-ID Research Lab, Technical University of Lisbon, Portugal
- Prof. Juan-Vicente Capella-Hernandez; Executive and Quality Manager, Wireless Sensor Networks Valencia, Inc.; Member, Editorial Board: IEEE RITA Journal; International Journal On Advances in Networks and Services; International Journal of Computer Science & Information Technology Applications; Universitat Politecnica de Valencia, Valencia, Spain
- Prof. Juan Jose Martinez Castillo; Director of The Acantelys Research Group and Coordinator of the Computer Engineering Department, Universidad Gran Mariscal de Ayacucho, Venezuela
- Dr. Daniel Bo-Wei Chen; Department of Electrical Engineering, Princeton University, New Jersey, USA
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- Prof. Kevin Daimi (Congress Steering Committee); Director, Computer Science and Software Engineering Programs, Department of Mathematics, Computer Science and Software Engineering, University of Detroit Mercy, Detroit, Michigan, USA
- Prof. Leonidas Deligiannidis (Session Chair & Co-Editor, FECS); Professor, Computer Science, Wentworth Institute of Technology, Massachusetts, USA
- Somdip Dey; School of Computer Science, The University of Manchester, Manchester, UK
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- Prof. Robert Morelos-Zaragoza (ICWN); Electrical Engineering Department, San Jose State University, San Jose, California, USA; Senior Member, IEEE; Author of book "The Art of Error Correcting Coding" (2nd edition, John Wiley and Sons), USA
- Prof. G. N. Pandey (Congress Steering Committee); Vice-Chancellor, Arunachal University of Studies, Arunachal Pradesh, India; Adjunct Professor, Indian Institute of Information Technology, Allahabad, India
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- Dr. Kandarpa Kumar Sarma (ICWN); Associate Professor, Head of Department ic, Department of Electronics and Communication Technology, Gauhati University, Assam, India; Senior Member, IEEE; Fellow, IETE
- Prof. Sukumar Senthilkumar; School of Computing Science and Engineering, Division of Digital Media Computing, Vellore Institute of Technology-University, Vellore, Tamilnadu, India
- Ashu M. G. Solo (Congress Steering Committee & Publicity Chair); Fellow of British Computer Society, Principal/R&D Engineer, Maverick Technologies America Inc.
- Dr. Jacek Stando; Technical University of Lodz, Poland
- Prof. Fernando G. Tinetti (Congress Steering Committee); School of Computer Science, Universidad Nacional de La Plata, La Plata, Argentina; Co-editor, Journal of Computer Science and Technology (JCS&T)
- Prof. Quoc-Nam Tran (BIOCOMP, FCS); Professor and Chair, Department of Computer Science, University of South Dakota, USA
- Prof. Patrick S. P. Wang (Congress Steering Committee); Fellow: IAPR, ISIBM, WASE; Professor of Computer and Information Science, Northeastern University, Boston, Massachusetts, USA and Zijing Visiting Chair, ECNU, Shanghai, NTUST, Taipei; iCORE Visiting Professor, University of Calgary, Canada; Otto-von-Guericke Distinguished Guest Professor, University Magdeburg, Germany
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- William Yang (SERP, FCS); University of Arkansas Little Rock, Arkansas, USA

We would like to extend our appreciation to the members of the program committees of individual sessions, tracks, and workshops; their names do not appear in this document; they are listed on the web sites of individual tracks.

As Sponsors-at-large, partners, and/or organizers each of the followings (separated by semicolons) provided help for at least one track of the World Congress: Computer Science Research, Education, and Applications Press (CSREA); Taylor & Francis, UK (<http://www.taylorandfrancis.com/>); US Chapter of World Academy of Science (<http://www.world-academy-of-science.org/>); American Council on Science & Education & Federated Research Council (<http://www.americancse.org/>); HoIP, Health Without Boundaries, Healthcare over Internet Protocol, UK (<http://www.hoip.eu>); HoIP Telecom, UK (<http://www.hoip-telecom.co.uk>); and WABT, Human Health Medicine, UNESCO NGOs, Paris, France (<http://www.thewabt.com/>). In addition, a number of university faculty members and their staff (names appear on the cover of the set of proceedings), several publishers of computer science and computer engineering books and journals, chapters and/or task forces of computer science associations/organizations from 5 countries, and developers of high-performance machines and systems provided significant help in organizing the conference as well as providing some resources. We are grateful to them all.

We express our gratitude to keynote, invited, and individual conference/tracks and tutorial speakers - the list of speakers appears on the conference web site. We would also like to thank the followings: UCMSS (Universal Conference Management Systems & Support, California, USA) for managing all aspects of the conference; Dr. Tim Field of APC for managing the printing of the proceedings; and the staff of Monte Carlo Resort (Convention department) in Las Vegas for the professional service they provided. Last but not least, we would like to thank the Co-Editors and Associate Co-Editors of FECS' 14: Prof. Hamid R.

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We present the proceedings of FECS' 14.

Steering Committee, 2014
<http://www.world-academy-of-science.org/>

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