

2013 Federated Conference on Computer Science and Information Systems (FedCSIS)

CONFERENCE REPORT

The 2013 edition of the Federated Conference on Computer Science and Information Systems (FedCSIS; www.fedcsis.org) was held in Kraków, Poland on September 8-11, 2013.

Since 2011, FedCSIS events are grouped into so called **conference areas**, characterized by various degree of events integration. Areas that are listed below in italics (and without the indication of the year 2013) signify "abstract areas" with no direct paper submissions (i.e. paper submissions are available only to individual events that belong to them).

- **AAIA'2013 - 8th International Symposium Advances in Artificial Intelligence and Applications**
 - AIMA'2013 - International Workshop on Artificial Intelligence in Medical Applications
 - ASIR'2013 - 2nd International Workshop on Advances in Semantic Information Retrieval
 - WCO'2013 - Workshop on Computational Optimization
- ***CSNS – Computer Science & Networked Systems***
 - CANA'13 - 6th Computer Aspects of Numerical Algorithms
 - MMAP'13 - 6th International Symposium on Multimedia Applications and Processing
- ***ECRM – Education, Curricula & Research Methods***
 - DS-RAIT'13 - Doctoral Symposium on Recent Advances in Information Technology
 - ISEC'13 - Information Systems Education & Curricula Workshop
- ***iNetSApp – Innovative Network Systems and Applications***
 - WSN'13 - 2nd International Conference on Wireless Sensor Networks
 - SoFAST-WS'13 - 2nd International Symposium on Frontiers in Network Applications, Network Systems and Web Services
- ***IT4MBS – Information Technology for Management, Business & Society***
 - ABICT'13 - 4th International Workshop on Advances in Business ICT
 - Agent Day'13
 - AITM'13 - 11th Conference on Advanced Information Technologies for Management
 - IT4L'13 - 2nd Workshop on Information Technologies for Logistics
 - KAM'13 - 19th Conference on Knowledge Acquisition and Management
 - TAMoCo'13 - Techniques and Applications for Mobile Commerce
- ***SSD&A - Software Systems Development & Applications***

- ATSE'13 - 4th International Workshop Automating Test Case Design, Selection and Evaluation
- IWCPS'13 - International Workshop on Cyber-Physical Systems
- PBDA'13 - Performance of Business Database Applications
- WAPL'13 - 4th Workshop on Advances in Programming Language

During FedCSIS 2013, the following Keynote Presentations have been delivered:

- Wil van der Aalst, Technische Universiteit Eindhoven, Netherlands: „Process Mining: Making Sense of Processes Hidden in Big Event Data”
- Barrett R. Bryant, University of North Texas, USA: „Grammarware, Semantics and Modelware”
- Pedro José Marrón, University of Duisburg-Essen and Fraunhofer FKIE, Germany: „Are we Ready to Go Large-Scale? Embedded Technologies for Smart Cities”
- Márta Nagy Rothengass, European Commission, DG Communications Networks, Content and Technology Unit G3 - Data Value Chain: „Data Value Chain in Europe”
- Jacek Żurada, University of Louisville, Louisville, Kentucky, USA 2014 IEEE VP-Technical Activities (2013-Elect): „Nonnegative Matrix Factorization and Its Application to Pattern Analysis and Text Mining”

FedCSIS was organized by the Polish Information Processing Society together with the Systems Research Institute Polish Academy of Sciences, the Wrocław University of Economics and the AGH University of Science and Technology, under the auspices of Prof. Barbara Kudrycka, Minister of Science and Higher Education, Prof. Michał Kleiber, President of Polish Academy of Sciences and Michał Boni, Minister of Administration and Digitalization, Prof. Tadeusz Słomka, Rektor AGH University of Science and Technology, Prof. Tadeusz Gospodarowicz, Rektor Wrocław University of Economics, Marek Sowa, Marszałł of Małopolska and Prof. Jacek Majchrowski, Mayor of Kraków.

Technical co-sponsors of the FedCSIS 2013 conference included: (1) IEEE Region 8, (2) IEEE Computer Society Chapter, Poland, (3) IEEE Gdańsk Computer Society Chapter, Poland, (4) ACM Special Interest Group on Applied Computing, (5) Łódź ACM Charter, (6) Polish Chapter of the IEEE Computational Intelligence Society (CIS), (7) SERSC: Science & Engineering Research Support soCiety, (8) Asociación de Técnicos de Informática, (9) The Polish Association for Information Systems, (10) Polish Society for Business Informatics, (11) Polish Chamber of Commerce for High Technology, (12) Computer Science Committee of the Polish Academy of Sciences.

Furthermore, in addition to the general FedCSIS technical collaborators, the following organizations were involved in organization of its individual events.

- The International Symposium on Advances in Artificial Intelligence and Applications (as well as its Workshops) was technically co-sponsored by: IEEE

SMC Technical Committee on Computational Collective Intelligence, International Rough Set Society, Romanian Association for Artificial Intelligence, International Fuzzy Systems Association, Polish Neural Networks Society.

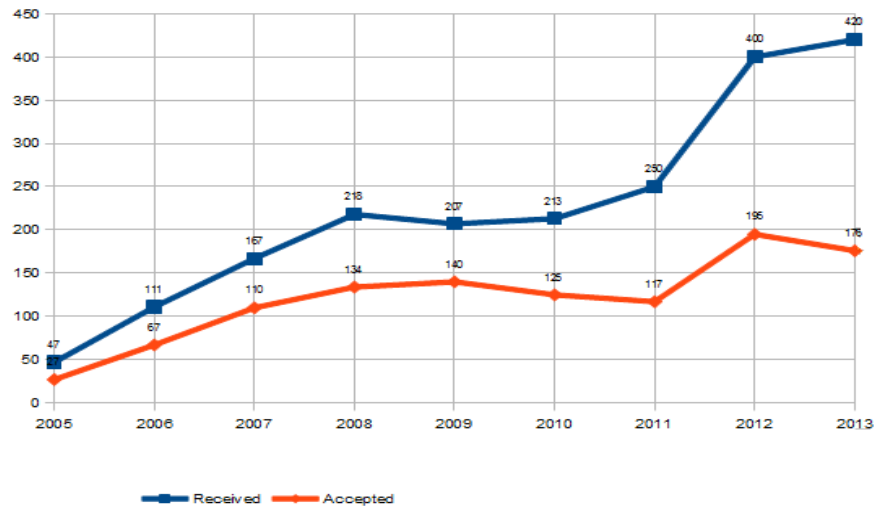
Polish Ministry of Science and Higher Education and Intel have sponsored the conference.

The new initiative started during the 2013 FedCSIS Conference was the Doctoral Symposium on Recent Advances in Information Technology (DS-RAIT'2013). During DS-RAIT'2013 there were 14 papers presented by doctoral students from different countries. The special workshop entitled: "Public presentations – Influencing People" presented by Helmut Glässer has been organized for the participants of DS-RAIT'2013.

During the AAIA 2013, the Professor Zdzisław Pawlak prize for the best paper was awarded for the eighth time. This year the winners were: Bartosz Krawczyk for the paper: *Combining One-Class Support Vector Machines for Microarray Classification*, as the Best Student Paper, and Kyle M. Tarplee, Ryan Friese, Anthony A. Maciejewski, Howard Jay Siegel for the paper: *Efficient and Scalable Computation of the Energy and Makespan Pareto Front for Heterogeneous Computing Systems* as the Best Paper. These awards were co-sponsored by the Polish Information Processing Society. Furthermore, the International Fuzzy Systems Association Awards for Young Scientist were presented to: Katarzyna Kaczmarek for the paper: *Linguistic knowledge about temporal data in Bayesian linear regression model to support forecasting of time series* and to Alex Tormási for the paper: *Fuzzy-Based Multi-Stroke Character Recognizer*. These awards were financially sponsored by the International Fuzzy Systems Association.

English was the exclusive conference language. In 2013, the FedCSIS conference attracted 420 papers. Out of submitted contributions, after receiving at least two reviews for each paper, 175 articles were accepted as full papers (acceptance rate of 41.67%), 61 articles were accepted as short papers, and 18 as a position papers. Conference materials were initially published on USB Pen Drives (as Preprints). After the conference, full and short papers are going to be included in the IEEE Digital Library (ISBN 978-1-4673-4471-5, IEEE Catalog Number CFP1385N-ART, ISSN 2300-5963); furthermore, they will be sent to the Thomson Reuters Web of Science for indexing. Position Papers are going to be published as a separate volume (ISBN 78-83-60810-55-2, ISSN 2300-5963). Furthermore, Proceedings and Position Papers of the FedCSIS 2013 Conference (in their final version) are going to be posted at the conference WWW site (joining Proceedings of the past conferences). It should be stressed that only papers presented in the conference are going to be published in either form (the FedCSIS conference series strictly adheres to the "IEEE No-show Policy"). Out of 254 texts accepted for publication, 120 articles (47%) came from Poland, while the remaining 134 (53%) from abroad (representing 36 countries). The conference attracted more than 300 registered participants.

The figure below represents the growth of the FedCSIS conference, since 2005 when it started as a Scientific Session organized within the Autumn Meeting of the Polish Information Processing Society, through years 2006-10 when it was run under the name International Multiconference on Computer Science and Information Systems (IMCSIT), and 2011-13 when the current name and formula have been adopted. Here, “Accepted” means – accepted as full / regular papers.



In a similar way as in the past, best papers accepted at FedCSIS (their modified and extended versions) will be published in Special Issues of international journals, such as:

- **ISI indexed:** Computer Science and Information System, International Journal of Computer-Supported Collaborative Learning (IJCSCL)
- **Springer book series:** Studies in Computational Intelligence
- **Others:** Innovative Network Systems and Applications, Informatica (Slovenia), IJCSA: International Journal of Computer Science & Applications, Business

Informatics, International Journal of Mobile and Blended Learning, International Journal of Web-Based Learning and Teaching Technologies.

Each year the acceptance rate for texts published in post-conference Special Issues of international journals is below 30%.

Submitted by the FedCSIS Conference Series Chairs,

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