

2014 Federated Conference on Computer Science and Information Systems (FedCSIS)

CONFERENCE REPORT

The 2014 edition of the Federated Conference on Computer Science and Information Systems (FedCSIS; www.fedcsis.org) was held in Warsaw, Poland on September 7-10, 2014. FedCSIS 2014 was hosted by the Department of Mathematics and Information Sciences of the Warsaw University of Technology.

Since 2011, FedCSIS events are grouped into so called **conference areas**, characterized by various degree of integration between constituting events. Areas that are listed below without the indication of the year 2014 signify "abstract areas" with no direct paper submissions (i.e. paper submissions are available only to individual events that belong to them).

- **AAIA'14 – 9th International Symposium: Advances in Artificial Intelligence and Applications**
 - AIMA'14 – 4th International Workshop on Artificial Intelligence in Medical Applications
 - ASIR'14 – 4th International Workshop on Advances in Semantic Information Retrieval
 - CEIM'14 – 1st Complex Events and Information Modelling
 - WCO'14 – 7th Workshop on Computational Optimization
- **CSS – Computer Science & Systems**
 - CANA'14 – 7th Computer Aspects of Numerical Algorithms
 - MMAP'14 – 7th International Symposium on Multimedia Applications and Processing
 - ScoDiS-LaSCoG'14 – 2nd Workshop on Scalable Computing in Distributed Systems and 7th Workshop on Large Scale Computations on Grids
- **ECRM – Education, Curricula & Research Methods**
 - E2LP'14 – Workshop Application of Innovative Teaching Methods in Embedded Engineering
 - ISEC'14 – Information Systems Education & Curricula Workshop
- **iNetSApp – Innovative Network Systems and Applications**
 - EAIS'14 – Emerging Aspects in Information Security
 - SoFAST-WS'14 – 3rd International Symposium on Frontiers in Network Applications, Network Systems and Web Services
 - WSN'14 – 3rd International Conference on Wireless Sensor Networks
- **IT4MBS – Information Technology for Management, Business & Society**
 - ABICT'14 – 5th International Workshop on Advances in Business ICT
 - AITM'14 – 12th Conference on Advanced Information Technologies for Management

- ISM'14 – 9th Conference on Information Systems Management
- IT4L'14 – 3rd Workshop on Information Technologies for Logistics
- KAM&AI4KM'14 – 20th Conference on Knowledge Acquisition and Management and 2nd Workshop on Artificial Intelligence for Knowledge Management (IFIP)
- **Joint Agent-oriented Workshops in Synergy (JAWS)**
 - MAS&M'14 – International Workshop on Multi-Agent Systems and Simulation
 - SEN-MAS'14 – 3rd International Workshop on Smart Energy Networks & Multi-Agent Systems
- **SSD&A – Software Systems Development & Applications**
 - ATSE'14 – 5th International Workshop Automating Test Case Design, Selection and Evaluation
 - MDASD'14 – 3rd Workshop on Model Driven Approaches in System Development

During FedCSIS 2014, the following Keynote Presentations have been delivered:

- Irvin King (The Chinese University of Hong Kong); *Big Education in the Era of Big Data*
- Michael Luck (King's College London); *Toward Electronic Order*
- Marco Aiello (University of Groningen); *EmPowering the Power Grid through ICT*
- Ivan Stojmenovic (Deakin University, Australia); *Mobile Cloud, Crowd and Fog Computing, Communications and Sensing*

FedCSIS 2014 was organized by the Polish Information Processing Society, Warsaw University of Technology, Wrocław University of Economics and Systems Research Institute Polish Academy of Sciences, under the auspices of Prof. Lena Kolarska-Bobińska, Minister of Science and Higher Education, Dr Rafał Trzaskowski, Minister of Administration and Digitization, Prof. Michał Kleiber, President of the Polish Academy of Sciences, Major General Wiesław Leśniakiewicz, Chief Commandant of the State Fire Service, Prof. Hanna Gronkiewicz-Waltz, Mayor of the Capital City of Warsaw, Prof. Jan Szmidt, Rector of Warsaw University of Technology, Gen. Prof. Zygmunt Mierczyk, Rector of Military Technical Academy, and Prof. Andrzej Gospodarowicz, Rector of Wrocław University of Economics.

Technical co-sponsors of the FedCSIS 2014 conference included: (1) IEEE Computer Society, (2) IEEE Region 8, (3) Computer Society Chapter, Poland, (4) Gdańsk Computer Society Chapter, Poland, (5) Polish Chapter of the IEEE Computational Intelligence Society (CIS), (6) ACM Special Interest Group on Applied Computing, (7) Łódź ACM Chapter, (8) International Federation for Information Processing (IFIP), (9) European Alliance for Innovation (EAI), (10) Informatics Europe, (11) Asociación de Técnicos de Informática, (12) Committee of the Computer Science of the Polish Academy of Sciences, (13) Polish Society for Business Informatics, (14) Polish Chamber of

Information Technology and Telecommunications, (15) Polish Chamber of Commerce for High Technology, (16) Mazovia Cluster ICT and (17) Eastern Cluster ICT Poland.

Furthermore, in addition to the general FedCSIS 2014 technical collaborators, the International Symposium on Advances in Artificial Intelligence and Applications (as well as its Workshops) was technically co-sponsored by: International Rough Set Society, International Fuzzy Systems Association and Polish Neural Networks Society.

Polish Ministry of Science and Higher Education, Intel, Orange Poland, S.A. and Samsung have sponsored the conference.

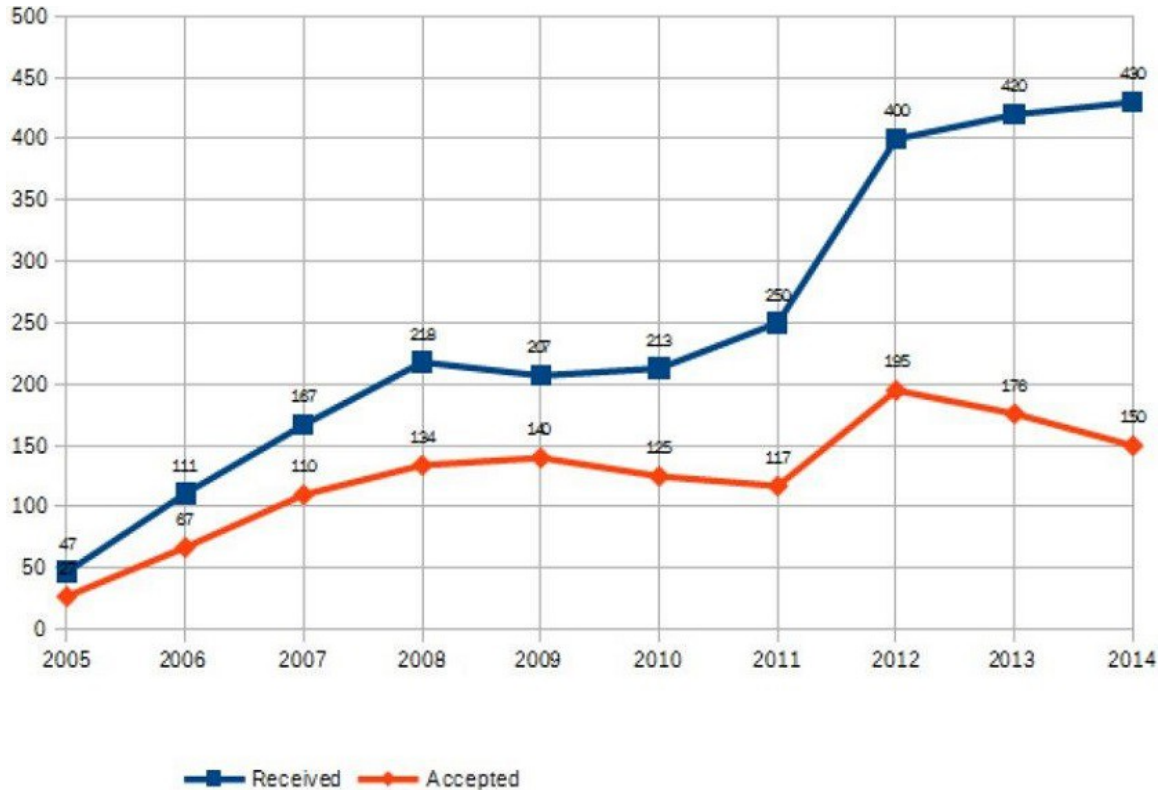
During the AAIA 2014, the Professor Zdzisław Pawlak prize for the best paper was awarded for the eighth time. This year the winners were: András Bóta, Miklós Krész, András Pluhár for the paper: *The Inverse Infection Problem*, as the Best Student Paper, and Bernadette Varga, Alina Dia Trambitas-Miron, Andrei Roth, Anca Marginean, Radu Razvan Slavescu, Adrian Groza for the paper: *LELA – a Natural Language Processing System for Romanian Tourism* 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: Andrzej Janusz, Sebastian Stawicki, Hung Song Nguyen for the paper: *Adaptive Learning for Improving Semantic Tagging of Scientific Articles*. This award was financially sponsored by the International Fuzzy Systems Association.

During the FedCSIS 2014 a special workshop was organized by the team of the EU project “Embedded Computer Engineering Learning Platform (E2LP).” Papers presented during this Workshop have been published as a separate volume. Furthermore, Orange Poland S.A. organized a special session devoted to startup activities that the Orange Lab is involved in. Finally, an open Technical Meeting of IFIP Working Group TC12.6 (Knowledge Management) took also place during the conference.

English was the exclusive conference language. In 2014, the FedCSIS conference attracted 430 submissions (not counting papers submitted to the E2LP workshop and papers resulting from the data mining competition). Out of submitted contributions, after obtaining at least two reviews for each paper, 150 articles were accepted as full / regular papers (acceptance rate of 34.88%), 43 articles were accepted as short papers, and 36 as a position papers.

Conference materials were initially published on USB Pen Drives (as Preprints) and distributed to conference participants. After the conference, full and short papers are going to be submitted to 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 2014 Conference (in their final version) are going to be posted at the conference WWW site – available through the Archive section (joining Proceedings from all 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 246 texts accepted for publication, 96 articles (39%) came from Poland, while the remaining 134 (61%) from abroad (representing 45 countries).

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 2011-14 when the current name and formula have been adopted. Here, “submitted” means – submitted as results of a call for papers, while “accepted” means – accepted as full / regular paper. Henceforth, the graph does not include information about “invited” papers (e.g. keynotes, contest winners, dissemination papers, etc.).



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

Respectfully submitted by the FedCSIS Conference Series Chairs,

Maria Ganzha,
Leszek Maciaszek,
Marcin Paprzycki